January 31, 2006 1 of 106

## Meeting of the Federal Open Market Committee January 31, 2006

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., starting at 9:00 a.m. on Tuesday, January 31, 2006. Those present were the following:

Mr. Greenspan, Chairman

Mr. Geithner, Vice Chairman

Ms. Bies

Mr. Ferguson

Mr. Guynn

Mr. Kohn

Mr. Lacker

Mr. Olson

Ms. Pianalto

Ms. Yellen

Mses. Cumming and Minehan, Messrs. Moskow, Poole, and Hoenig, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Stern, and Santomero, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

Mr. Reinhart, Secretary and Economist

Ms. Danker, Deputy Secretary

Ms. Smith, Assistant Secretary

Mr. Skidmore, Assistant Secretary

Mr. Alvarez, General Counsel

Mr. Baxter, Deputy General Counsel

Ms. Johnson, Economist

Mr. Stockton, Economist

Messrs. Connors, Eisenbeis, Judd, Kamin, Madigan, Sniderman, Struckmeyer, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

Messrs. Oliner and Slifman, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Whitesell, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Messrs. English and Sheets, Assistant Directors, Divisions of Monetary Affairs and International Finance, respectively, Board of Governors

January 31, 2006 2 of 106

Mr. Simpson, Senior Adviser, Division of Research and Statistics, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Chaboud, Mses. Kusko and Weinbach, Senior Economists, Divisions of International Finance, Research and Statistics, and Monetary Affairs, respectively, Board of Governors

Ms. Roush, Economist, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Stone, First Vice President, Federal Reserve Bank of Philadelphia

Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively

Messrs. Evans and Hakkio, Mses. Mester and Perelmuter, Messrs. Rasche, Rolnick, and Steindel, Senior Vice Presidents, Federal Reserve Banks of Chicago, Kansas City, Philadelphia, New York, St. Louis, Minneapolis, and New York, respectively

Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

January 31, 2006 3 of 106

## Transcript of the Federal Open Market Committee Meeting of January 31, 2006

## [Applause]

CHAIRMAN GREENSPAN. Thank you all very much. I'll try to say more later, but I'm not sure I can make it. [Laughter] Item 1 on the agenda is just basically for me to turn it over to Roger Ferguson to do as he sees fit. [Laughter]

MR. FERGUSON. Thank you very much. I will do what is right. [Laughter] Let me open the floor now for nominations for a Chairman and a Vice Chairman of this Committee.

CHAIRMAN GREENSPAN. For the day.

MR. FERGUSON. Now, you'll see what happens. [Laughter] Don't presume anything. Governor Kohn.

MR. KOHN. I move that the Committee elect Alan Greenspan as its Chairman to serve for the remainder of today and Timothy Geithner as its Vice Chairman to serve until the election of a successor at the first regularly scheduled meeting of 2007.

MR. FERGUSON. Thank you very much. Is there a second?

PARTICIPANT. Second.

MR. FERGUSON. Fine. Is there any discussion? Is there any objection? Hearing none, it is unanimous. Congratulations. [Laughter] Before democracy moves too quickly, [laughter] we also have to move to plan for the election of a new Chairman. So let me, again, turn to Governor Kohn.

MR. KOHN. Thank you, Governor Ferguson. I further move that the Committee conduct a notation vote upon the swearing-in of a new Chairman of the Board of Governors to elect Alan Greenspan's successor as Chairman of this Committee.

MR. FERGUSON. Thank you. Is there a second? I do need a second on that.

January 31, 2006 4 of 106

PARTICIPANT. I second.

MR. FERGUSON. Thank you very much. Any objection? Any discussion? None. So we will plan to do as Governor Kohn has suggested and hold a notation vote when a new Chairman is sworn in for the Board of Governors. Mr. Chairman, I now turn the floor back to you.

CHAIRMAN GREENSPAN. Why don't you continue on with the staff while you're in full swing?

MR. FERGUSON. Well, I'm actually not in full swing, because I don't have the documents in front of me. [Laughter]

CHAIRMAN GREENSPAN. Why don't you read that?

MS. DANKER. As Secretary and Economist, Vincent Reinhart; as Deputy Secretary,
Debbie Danker; as Assistant Secretaries, Dave Skidmore and Michelle Smith; as General Counsel,
Scott Alvarez; as Deputy General Counsel, Tom Baxter; as Economists, Karen Johnson and Dave
Stockton; as Associate Economists from the Board, Tom Connors, Steve Kamin, Brian Madigan,
Sandy Struckmeyer, and David Wilcox; as Associate Economists from the Banks, Bob Eisenbeis,
John Judd, Mark Sniderman, Joe Tracy, and John Weinberg.

MR. FERGUSON. Thank you. I need someone to move those names for election.

PARTICIPANT. So moved.

MR. FERGUSON. A second?

SEVERAL. Second.

MR. FERGUSON. Any discussion? Any objection? So, again, those are elected unanimously. Congratulations.

CHAIRMAN GREENSPAN. We also have to designate the Chief FOIA Officer. Thanks to a recent executive order, the FOMC is required to appoint a Chief FOIA Officer. The consensus

January 31, 2006 5 of 106

candidate appears to be the Committee's Deputy Secretary. Accordingly, a vote is needed, indeed mandatory, to designate Debbie Danker, or her successor, as the FOMC's Chief FOIA Officer, with authority to "subdelegate" duties as appropriate. And we stipulate that the addition of that word, which is not legally required, be expunged from the record! [Laughter] Without objection.

The next item is the proposed revisions to the Program for Security of FOMC Information. Proposed additions to the Program for Security of FOMC Information reflect: (1) incorporation of the Board's new rules on access to confidential information by noncitizens, (2) a minor adjustment to align the program with the clause in the foreign currency authorization, and (3) a statement of the Chairman's powers to make exceptions, which had been inadvertently trimmed in last year's rewriting. Would somebody like to move?

PARTICIPANT. So moved.

CHAIRMAN GREENSPAN. Without exception. Our next item is the selection of a Federal Reserve Bank to execute transactions for the System Open Market Account. My notes say that New York is again the odds-on favorite. [Laughter] I'm always going with the odds-on favorite. I would suggest that, unless somebody moves, I will do so and assume it's effectively implemented. Without objection, so ordered.

Next, selection of a Manager of the System Open Market Account. Dino Kos is the incumbent. And on the presumption that he is acceptable to the New York Bank, he then becomes the candidate for Manager of the System Open Market Account. Would somebody like to move the nomination?

MR. FERGUSON. I'll move that nomination.

CHAIRMAN GREENSPAN. Without objection. Now, as to the authorization for Desk operations—why don't you take over and propose it?

January 31, 2006 6 of 106

MR. KOS. Thank you, Mr. Chairman. There are two votes. On the domestic authorization, I'm recommending that the Committee approve it. There are no amendments that are being suggested.

MR. FERGUSON. So moved.

CHAIRMAN GREENSPAN. Without objection.

MR. KOS. Okay. Thank you. Then, the next vote is on the foreign currency authorization, the foreign currency directive, and the procedural instructions. In the memo that I circulated, there was one small amendment that I am suggesting to the authorization, having to do with some housekeeping language related to reverse repos, to bring it into alignment with domestic operations. It's a purely housekeeping item.

CHAIRMAN GREENSPAN. Yes. President Lacker has expressed his intention to uphold the Richmond tradition of voting against both the foreign currency authorization and the directive.

[Laughter] But he remains in favor of the procedural instructions. So lacking Lacker, are there any objections? [Laughter] Would you like time to—

MR. LACKER. Very respectfully, Mr. Chairman, I'd like to vote against the foreign currency operation authorization. Those of you who were here when my predecessor registered a similar dissent three years ago, and three years before that, should be familiar with the reasoning. For those of you who were not here then, the case is very simple. Sterilized intervention can't possibly be more than fleetingly effective unless it serves as a signal regarding future monetary policy operations. To the extent that such interventions are seen as providing such a signal, we risk confusing the public regarding future monetary policy and threaten to compromise our independence. And to the extent that such interventions do not signal future policy support and thus

January 31, 2006 7 of 106

have no lasting effect, we risk compromising perceptions of our competence. And neither outcome is desirable. So very, very respectfully, Mr. Chairman, I will decline to support the authorization.

CHAIRMAN GREENSPAN. Any further discussion on this issue? Would you like to—PARTICIPANT. So moved.

CHAIRMAN GREENSPAN. Without other objection—noting, of course, that the Richmond Bank is dissenting. Dino Kos.

MR. KOS.<sup>1</sup> Thank you, Mr. Chairman. With the start of the new year, domestic markets were preoccupied with the same set of questions that occupied market participants in 2005. How much longer would the tightening cycle continue? What is the shape of the yield curve telling us? Are there signs of a slowdown? And are inflation pressures increasing, or are they likely to ebb?

The top panel on the first page graphs the three-month deposit rate in black and the three-month rate three and nine months forward in red since June 2005. As the market began to anticipate an end to the tightening cycle, the cash and forward rates began to converge in recent weeks. With three- and nine-month forwards essentially trading on top of each other, and allowing for term premiums, taken at face value forward rates suggest some more modest tightening but also some probability of an ease later this year. Those market participants that are bearish on interest rates and the economy point to data hinting at softness, such as signs of a slowdown in housing. The bleak view was given a lift on Friday by the weaker-than-forecast fourth-quarter GDP report. These market participants see either a quick end to the tightening cycle or a swift reversal toward policy easing later this year. The counter view is that inflationary pressures will forestall an early end to the tightening, much less usher in a new easing cycle. Ironically those with that view took comfort from the price data in Friday's GDP report.

The compression we see in cash and forward rates at the short end of the curve is also visible for longer maturities. The middle panel graphs the target fed funds rate in green along with yields on two- and ten-year Treasury notes. Yields have slowly been grinding upward the past few days toward 4½ percent as the market, on balance, has come to discount further tightening beyond today's meeting. In the past week, the yield on the two-year note has risen from about 4.35 percent to 4.5 percent. Given the mixed data, it's difficult to make the case that the upward move was driven by data alone. Indeed, for the first time in a while, traders were talking about looming supply given fiscal needs. Yesterday the Treasury announced a somewhat higher-than-expected borrowing need for the first quarter. And at last week's two-year auction, the low level of participation by indirect bidders was taken as a signal

<sup>&</sup>lt;sup>1</sup> The materials used by Mr. Kos are appended to this transcript (appendix 1).

January 31, 2006 8 of 106

that foreign demand was waning. Perhaps market participants are finally coming to the view that yields are too low given the likely prospect that the cost of financing positions will continue to rise at least a while longer.

With the convergence of yields along the curve, last summer's chatter about yield curve inversions flared up anew. The bottom panel graphs two views of the yield curve going back to 1977. The red line graphs the spread between the ten-year note and the three-month bill. The blue line graphs the yield spread between the ten-year and the two-year notes. These are monthly averages, and the last data point is from January 2006 through last Friday. The gray areas denote recessions.

Looking at this chart and similar charts, it's easy to see why the curve flattening has received so much attention. In recent decades, recessions have tended to be preceded by curve inversions. Of course, markets are now so much more developed and sophisticated that maybe it's different this time. Changes in markets, such as the role of pension funds or central bank reserve accumulation, may be distorting the curve. And maybe that argument is right. But a cautionary point is in order. After all, the inversion in 2000 was dismissed by most analysts as technically inspired given the shrinking stock of federal debt and the Treasury's buyback program at the long end of the curve. On the other hand, the pessimists may be overplaying their hand too early in the game. We haven't had much of an inversion as yet. You need a magnifying glass to see the inversion, which is very small and so far very brief. The curve has merely gone flat. As I noted last summer, the curve can be flat for years as was the case in the late 1990s—without adverse effects on the broader economy. The Chairman has talked about the conundrum, which most private-sector commentators have used as a jumping off point to talk about low nominal yields at the long end of the curve. Until recently, less attention was focused on trends in real rates both here and abroad.

The top of page 2 graphs the yield of ten-year inflation-linked securities for the United States, the United Kingdom, and France for the past seven months. The ten-year TIPS yield in the United States (the green line) has traded at about 2 percent. That's up from about 1 percent briefly observed in 2004 but well below the 4 percent earlier in this decade, when the market was still maturing. U.K. and French real rates have also fallen since the beginning of the decade. The United Kingdom probably has the most developed inflation-linked market, with maturities going as far out as fifty years. The middle panel graphs the real rate on ten-, thirty-, and fifty-year inflation-linked bonds since September 2005. Note that thirty- and fifty-year yields have gone down faster than the yields at the ten-year maturity. The fifty-year real yield traded below ½ percent, and the fifty-year security issued just last week traded under 40 basis points.

What accounts for such low rates? Well maybe institutions are worried about the United Kingdom's long-term inflation prospects. But that does not seem to be borne out by anecdotal or other indicators. Two intertwined trends in the United Kingdom related to the insurance and pension fund businesses are frequently cited. First, after

January 31, 2006 9 of 106

the decline in equity prices earlier in the decade, U.K. and other European insurers lowered allocations to equity and shifted toward fixed income. Second, in the United Kingdom, pension rules now require fund managers to match the duration of liabilities with similar-duration assets. But the shortage of supply relative to demand has pushed bond prices up and yields down. As a result, the very long end of the U.K. real yield curve has been inverted. The long end of the nominal curve, as shown in the bottom left panel, has also inverted. To fill out the picture, the bottom right panel graphs ten-, thirty-, and fifty-year break-even rates; but given the distortions, it's not clear how much should be read into these numbers. Such movements in U.K. real yields have caught the attention of U.S. portfolio managers. With continued talk about the prospect for changes to pension fund rules here, there are those who believe that the United States will gravitate toward the U.K. approach of requiring the matching of duration for assets and liabilities. If so, then the prospect of a steady bid for long-dated assets may both damp yield volatility at the long end and lower yields from what they might have been. That would truly make the curve very suspect as an indicator of future economic performance.

If the shape of the U.S. yield curve is bearish for the economy, there is no shortage of indicators pointing the other way. I will note that in 2000, when the curve last inverted, the stock market soon slumped, credit spreads began a sudden widening, and the dollar was appreciating. In this cycle, these other indicators are not flashing warning lights just yet. The dollar tripped up many forecasters in 2005 by appreciating. But as shown in the top panel on page 3, more recently the dollar has depreciated against most currencies, including a few Asian currencies whose exchange rates against the dollar had been somewhat sticky in the past. Equities have been rallying globally, especially in countries leveraged to the global economy, such as Korea in technology and Brazil in commodities. Even the Nikkei has recovered from its Livedoor-inspired swoon and the curtailment of trading on the Tokyo Stock Exchange due to problems in processing large volumes. Credit markets continue to be favorable. As shown in the bottom left chart, the volatility on the S&P 100 rose from very low levels recently but has already come back. And Treasury volatility—shown on the bottom right—is low and recently has drifted still lower.

Moving to page 4, the top panel graphs the high-yield and emerging market debt spreads. These two spreads essentially moved together for several years and were viewed as being of similar riskiness. As shown in the top panel, there was a divergence in mid-2004 when emerging-market yields blew out about 150 basis points. In mid-2005, the divergence cut the other way, with emerging markets outperforming and spreads narrowing to new record lows. While some commentators ascribed the narrowing of emerging-market debt to the search for yield, rising risk appetite, and "excess liquidity," others pointed to improving fundamentals driven by higher commodity prices, better fiscal performance, lower inflation, and higher reserve levels that insulated these countries from external shocks. The pie charts below attempt to explain, if not justify, the benign explanation. The two middle pie charts show the ratings distribution of the high-yield index as of October 2002 and again as of year-end 2005. The rating distribution of the high-yield index is nearly

January 31, 2006 10 of 106

identical. The two pie charts at the bottom of the page show the rating composition of the emerging-market index as of the same two dates. Note that the share of higher-rated BBB or investment-grade assets in blue grew from 29 to 38 percent. Meanwhile, the share of low-rated B and CCC paper, which accounted for 33 percent of the index in October 2002, shrunk to only 11 percent at year-end.

In short, the ratings composition is higher for the emerging-market index relative to the high-yield index in absolute terms, and the trend has been toward relative ratings improvement. Of course, ratings are not the only factor. In a default situation, bondholders of a corporation can often assert their rights and recover meaningful amounts in a bankruptcy process overseen by the courts. In contrast, while countries have the power to tax, the ability of the creditors in a default to recover in negotiations—as we saw with Argentina—may not be as favorable.

Finally, a few words about domestic reserves management. On page 5, the top panel graphs the fed funds target in blue, the highs and lows for each day in gray, and the daily effective rate in red. You'll note that, although the effective rate was generally close to the target in the maintenance period that covered the year-end, there was a bit more variability of rates, usually late in the day, with some tendency for rates to soften. Part of this was related to normal year-end noise. Note also the drift higher in the effective rate ahead of the December FOMC meeting. This reflected the market's anticipation of the new target rate and the tendency to move the funds rate from the old to the new target rate days before the meeting.

The middle panel looks at this phenomenon more closely. It graphs the difference between the market (effective) rate and the target fed funds rates in the days before an FOMC meeting. To make a cleaner comparison, the sample includes only those periods in which the FOMC meeting fell on the first Tuesday of the two-week reserve maintenance period and periods in which there were no high-payment days through the meeting date that might have influenced market conditions. It should be noted that, in all these maintenance periods, the market had come to fully expect a 25 basis point tightening move by the start of the period. The blue line shows, for the 2004 sample dates, the drift higher in the funds rate as the FOMC meeting date gets closer. On average, the funds rate was about 7 basis points firm on the Thursday preceding the meeting and rose to be 21 basis points firm to the old target on the Tuesday meeting date itself. In our 2005 sample, the anticipation effect was even more pronounced in the days ahead of the meeting, with the funds rate 15 basis points firm on the Thursday and the expected move almost fully priced in on the day before the meeting.

The bottom panel underscores the difficulty that the Desk faces when it tries to lean against expectations that are so widely held. This graph shows, for the same sample of periods, the amount of average excess reserves in the days leading up to the FOMC meeting. It also shows what more-typical levels of excess reserves look like over the first four days of a maintenance period, based on reserve levels from periods in 2004 and 2005 in which there was no policy change and in which there were no

January 31, 2006 11 of 106

high-payment dates in the first four days. In 2004, the Desk was already providing much higher levels of excess reserves than normal in the days leading up to the FOMC meeting during these periods, in order to mitigate the anticipation effects. And these anticipation effects became even more pronounced in 2005, despite our having increased the levels of excess reserves even further. We tend to believe that the higher anticipation effects seen in 2005 reflected a learning process on the part of market participants since the start of the tightening cycle in mid-2004, as buyers and sellers tested their ability to arbitrage their reserve holdings over more days in the maintenance period around the expected policy change. It's not clear what the natural limit is to this process.

Mr. Chairman, I am happy to report once again that there were no foreign operations in the period. I will need a vote to approve domestic operations. Debby and I are happy to take any questions.

CHAIRMAN GREENSPAN. I'd like to go back to the British experience, which I think is intriguing in a number of different respects. The United Kingdom has TIPS-type issues going out fifty years. What do they index the fifty-year maturity to, incidentally?

MR. KOS. It's the RPIX.

CHAIRMAN GREENSPAN. So it's not terribly dissimilar to ours. But what I think is really quite fascinating is that these relationships are largely demographically driven. In other words, the question is essentially that, if we're heading into a society in which an ever-increasing proportion of the people are retired, then you have some real pressure to fund—which we don't do but everyone else should. Let's put it this way: Every pension theoretician will tell you there is no problem with pensions. All you have to do is make the appropriate maturity matches. And if you get a big surge in potential retirees, the demand for longer-term issues goes up, which we take as a given.

But this is the first evidence—at least that I've been able to see—that this is an overwhelming force because, irrespective of the other forces that drive the long-term rates, the spread between the thirty-year and the fifty-year is really quite pronounced. And it is suggesting that it cannot be an economic forecast. We have enough trouble forecasting nine months.

January 31, 2006 12 of 106

[Laughter] But to draw the distinction between thirty years out and fifty years out, I submit, is a wholly random variable. And so it has to be the demographics. And what the demographics are telling us is that the issue is large enough to essentially dominate the longer end of the markets. This suggests to me that the thirty-year, which we struggled to get rid of and is now coming back, may not turn out to be the longest maturity we're eventually going to sell because the evidence suggests that there is a very heavy demand in thirty-year forwards, all of which will tend to depress the thirty-year yield if we don't have a greater maturity. And there will be market pressures to delink that whole thirty-year plus back onto the issue.

I was wondering whether or not this subject is engaging the Street because I've been puzzled by the tranches of the thirty-year issue, which mature from 2020 on, when the fiscal problems in the United States seemingly mount potential instability—which is another way of saying that these pressures may overwhelm the economics. At least they are doing so in Britain. And the question is, do you think we're going to be replicating Britain's experience?

MR. KOS. Well, my reason for including this detail at the meeting really is because that's the anecdotal feedback that I've been getting over the past few weeks and months. And, in a sense, the U.K. experience caught a lot of portfolio managers here by surprise, and it has made them rethink their assumptions about the effect that a change in pension rules would have on our long end. And that, I think, is exactly the point that you're making.

CHAIRMAN GREENSPAN. But if we know that there has always been this presumption, well, it can't be large enough to have an effect.

MR. KOS. I think what we've learned from the U.K. case is that it can be. In a sense, the thirty-year gilt in the United Kingdom became disengaged from the rest of the curve some years ago. And we had an upward-sloping curve to about ten, and then it became inverted because of

January 31, 2006 13 of 106

these pension effects—or that seems to be the prevailing consensus. So some participants in our markets are trying to think ahead over the next five, ten, fifteen years about what changes in pension rules would do to the shape of the curve. What will be the demographics that will drive it? And it's making them rethink their assumptions about demand driven by demographics, as you say, versus other kinds of demands that might increase supply because of fiscal factors. So you might get an ironic effect in which you'll get more supply but the demand is even higher because of what's happening.

MR. REINHART. Mr. Chairman, may I make three points? The first is that I would underscore what Dino said. A great event study occurred when the prudent-man law in the United Kingdom changed, and you saw longer-term yields fall as a result because pension managers had to go out further on the curve.

CHAIRMAN GREENSPAN. What was the date of that?

MR. REINHART. Around 1998. Second, as you know, in the discussion with the Treasury, we actually tried very hard to convince them to go to thirty and then to go beyond. But that's a very slow-moving boat. Third, real long-term securities are very convex in return. So just because of the arithmetic of the yield curve, you would think that the fifty-year yield should be below the thirty-year, as the thirty-year is below the twenty-year. So in an environment of uncertainty about future yields, it isn't that surprising.

CHAIRMAN GREENSPAN. Well, what happened to the term premium?

MR. REINHART. In fact, the yield curve is a competition between two factors in uncertainty. Because of uncertainty, the term premium itself should march up at approximately linearly in maturity.

CHAIRMAN GREENSPAN. It gets overwhelmed by the arithmetic.

January 31, 2006 14 of 106

MR. REINHART. But convexity is a quadratic and starts about at the twenty-year maturity pulling down yields. That's why typically the thirty-year yield is below the twenty-year yield. When you get out to the fifty-year, then the effect of convexity is even more pronounced.

CHAIRMAN GREENSPAN. When we were doing the analysis of the change in the term premium, since we know the convexity characteristics and we know what the longer-term rates are, were we able to infer part of our analysis from the longer-term elements? That's the only thing we really add.

MR. REINHART. Sure. For instance, when the United Kingdom first issued a fifty-year security, we priced what a fifty-year maturity would be in the United States. And it was well below the thirty-year and not that dissimilar to what actually happened. So partly it is just that, because bonds are in price and that's what people care about but we quote yields, the effect of convexity is going to pull down longer-term yields.

## CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Going back to the Chairman's question on size, Dino, the press and many analysts focus on central bank reserves when they talk about what's buffeting intermediate-term rates. If you talk to Barclays, they give you awfully big numbers of potential dedicated moneys on the pension side, an order of magnitude of, say, multiples of six or seven times what central bank reserves are. Could we study the potential size that's at play here? And, of course, the United Kingdom is not just dedicated to U.K. fixed-income instruments. They're also looking at our fixed-income instruments at the longer end of the curve. So getting a sense of dimension here, if possible, might assist this conversation. I think that this is very, very important.

January 31, 2006 15 of 106

MR. KOS. I think it can be looked at. I think the other point that you hinted at, which is very important, is that it's not just U.S. managers looking at U.S. TIPS but European managers looking at U.S. inflation-linked securities. It's a very good point. I think it's worth studying.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I just wanted to note that I meet on Monday mornings before Open Market Committee meetings with a few pension fund managers and mutual fund managers just to hear what they're hearing in the markets. They are very much on the same wave length that you were, Mr. Chairman, in feeling that the flatness of the yield curve was largely due to the desire for long-dated securities in the pension fund arena to better match assets and liabilities and that it was not at all, or at least not in major part, a comment about the economy but more a function of institutional and market demand for these long-dated securities. Now, I don't know whether they think that the legislation now in the Congress is going to pass, but they seem to be very focused on the fact that they need more longer-dated securities and that supplies of the thirty-year would, in effect, create more demand for the thirty-year.

CHAIRMAN GREENSPAN. The legislation really is irrelevant. The problem here is that a set of liabilities is being created by the steepness of the retirement curve, and there is an obvious requirement to fund that set. But the bill in the Congress is trying to play games with the type of discount rate that companies can use. The only real discount factor that fund managers can use, if they seriously believe that what they are promising is to be guaranteed, is to put pension funds in U.S. Treasuries and to tranch them in a manner that exactly meets the maturity requirements. That situation, therefore, has nothing to do with what the piece of legislation is and everything to do with the rate of change of the population over 65.

January 31, 2006 16 of 106

MS. MINEHAN. I agree with you, but the fund managers that I have talked with would frame the problem in the context of increasing pressure from the outside.

CHAIRMAN GREENSPAN. In other words, whether that bill passes or not, the pressures to fund these liabilities are going to increase, especially after the baby-boom generation starts to retire and fund managers look at the size of it.

MR. KOS. I have heard a few anecdotes regarding CEOs who have been very surprised and become angry when they saw that their unfunded pension fund cost them earnings over the past few years. They basically directed the CFO and, in turn, the pension managers not to let this happen again. Thus, regardless of legislation, there has been a shift at the margin from equities into debt with matching duration.

MS. MINEHAN. Yes. That's certainly what the fund managers were saying.

CHAIRMAN GREENSPAN. Vice Chair, would you move to ratify?

VICE CHAIRMAN GEITHNER. So moved.

CHAIRMAN GREENSPAN. Thank you. Would you like to make an economic presentation, Dave?

MR. STOCKTON.<sup>2</sup> Thank you, Mr. Chairman. A few years back, I noted that my briefings could largely be characterized as a collection of confessions and excuses. This morning I would like to add a new element to that list: denial. As you know, the BEA's advance estimate for the growth in real GDP in the fourth quarter—shown in the top left panel of your first exhibit—came in last Friday at an annual rate of 1.1 percent, about half the pace that we had projected. But at this point, we don't believe that this estimate should be taken as a signal that the economy has fundamentally weakened. To be sure, after a first round of sorting through the details of that report, we haven't found a smoking gun that gives us any strong reason to override the BEA's estimate. But we have assumed that there will be a bounceback in some areas that were surprisingly weak last quarter, most notably motor vehicle output and federal spending.

As we see it, the recent configuration of data suggests that, to the extent that there was any noticeable weakness in the fourth quarter, it was short-lived, and we are

<sup>&</sup>lt;sup>2</sup> The materials used by Messrs. Stockton, Struckmeyer, and Sheets are appended to this transcript (appendix 2).

January 31, 2006 17 of 106

heading into the first quarter on a reasonably solid trajectory. As seen in the top right panel, after spiking up this autumn, initial claims quickly returned to pre-hurricane levels and have dropped even further in recent weeks, giving no suggestion of any softening in the labor market. Industrial production (line 1 of the middle left panel) actually peaked in the fourth quarter, driven by a sharp acceleration in manufacturing output (line 2). Moreover, as shown to the right, recent manufacturing surveys are supportive of our forecast of moderate gains in production as we move into the new year.

Consumer spending and capital outlays have also remained solid. Setting aside the effects of the large swings in motor vehicle purchases that occurred in the second half of last year, consumer spending, shown in the bottom left panel, has been on a steady uptrend. And yesterday's reading on real PCE excluding motor vehicles in December suggests that the first quarter started on a strong note. Shipments of nondefense capital goods (plotted as the red line in the bottom right panel) were released last week after the Greenbook was published, and they were stronger than we had projected. Moreover, new orders (the black line) have remained above shipments, suggesting that equipment spending should be buoyant in coming months.

The top left panel of your next exhibit lays out our longer-term outlook for real GDP. As seen by the blue bars, the growth of real GDP is projected to step up this year to 3.9 percent before falling back to 3 percent in 2007. That pattern is influenced importantly by our assumed hurricane effects, and as shown by the red bars, aside from those effects we are expecting a gradual deceleration in activity over the next two years. Our inflation projection is shown to the right. Overall PCE prices are expected to decelerate over the next two years as consumer energy prices slow sharply. We continue to expect a small bump-up in core inflation this year as higher prices for energy, nonfuel imports, and commodity prices are passed through into the prices of final goods and services. But we expect core inflation to edge back down in 2007 as these influences abate.

Although this story is pretty much the same as the one in December, we did have, in addition to last Friday's GDP excitement, a few other developments to deal with over the intermeeting period. As shown in the middle left panel, crude oil prices rose further in recent weeks and are now projected to average \$6.50 per barrel higher than in the December Greenbook. As Nathan will be discussing shortly, we also revised up a bit our projection for foreign activity, lowered our projection for the dollar, and—as shown in the middle right panel—raised our forecast for nonfuel import prices. With oil and imports providing a little more upward pressure on costs, we nudged up our forecast for core PCE prices this year and, along with it, our fed funds assumption over the next year—plotted as the black line in the bottom left.

We made no substantive changes to our fiscal policy assumptions. As shown in the bottom right panel, fiscal policy provides some impetus to activity this year, related largely to hurricane spending and the implementation of the prescription drug benefit, but is expected to be a nearly neutral influence next year. January 31, 2006 18 of 106

The principal source of slowing in aggregate activity in our forecast continues to be the housing sector, the subject of exhibit 3. The accumulating data have made us more confident, though far from certain, that we are reaching an inflection point in the housing boom. The bigger question now is whether we will experience the gradual cooling that we are projecting or a more pronounced downturn. I'll be interested to hear your reports this morning. As for the recent data, sales of existing homes (the red line in the top left panel) have dropped sharply in recent months and by more than we had expected. New home sales (the black line) have also moved off their peaks of last summer but are more consistent with our expectation of a gradual softening. That expectation receives some further support from the more-timely mortgage bankers' purchase index—plotted to the right. Purchase applications also are off their highs but are not indicating any sharp retrenchment through January.

With respect to house prices, the recent data and anecdotes also have pointed to some weakening. As a result, our forecast of a sharp deceleration in home prices—shown in the middle left panel—seems less of a stretch than it did a while back. As shown to the right, the bottom line is that, after contributing importantly to the growth of real GDP over the past four years, residential investment is expected to decelerate sharply this year and to turn down a bit in 2007. As we have noted before, our house-price forecast also has implications for consumer spending. Slower growth of house prices is the chief factor causing the wealth-to-income ratio (the black line in the bottom left panel) to drift down over the projection period. That downdrift, along with the lagged reaction to higher interest rates, results in a gradual rise in the personal saving rate over the next two years. As shown to the right, although spending growth falls short of that of income, overall PCE receives considerable support from the strong gains in disposable income that result from the projected flattening of energy prices, ongoing employment gains, and a step-up in the pace of hourly compensation.

Business investment is the subject of exhibit 4. Spending on equipment and software, plotted as the black line in the top left panel, slows gradually over the projection period, largely because the accelerator effects that propelled the earlier recovery in capital outlays begin to wane. Nevertheless, with the cost of capital remaining moderate and corporate balance sheets strong, we are forecasting solid increases in real E&S spending this year and next.

Our projection for total nonresidential structures, shown in the panel to the right, reflects some divergent patterns in the components. We expect outlays for drilling and mining (line 2) to increase sharply further this year in response to the run-up that has occurred in the prices for crude oil and natural gas. Although those prices are expected to level off, the lagged effects of the earlier gains should result in some further, albeit diminished, increase in drilling activity in 2007. Excluding drilling and mining (line 3) we are projecting a modest recovery in nonresidential construction activity in response to ongoing gains in employment and gradually declining vacancy rates in the office and industrial sectors.

January 31, 2006 19 of 106

One of the reasons that we are reasonably optimistic about the investment outlook is that the total return to capital—plotted in the middle left panel—remains quite favorable. And although we expect that return to recede a bit as labor costs pick up, it would still remain elevated by historical standards over the forecast period.

The remainder of the exhibit is something of a going-away present to the Chairman. While he always seemed to have a grip on where productivity was headed in the future, we always seemed to be struggling to explain what had happened in the past. Most recently, those struggles have centered on understanding the continuing strong gains in productivity in the first half of this decade. One important element of our story has been that the investment boom of the late 1990s was at least partly responsible for sowing the seeds of the further acceleration in multifactor productivity that we have experienced this decade. That capital equipment embodied rapidly improving technologies and allowed firms to sometimes radically restructure business processes. More broadly, as adjustment costs associated with absorbing those investments waned, the productivity advantages showed through more clearly.

The bottom panel provides some modest support for the proposition that some of the improved performance of multifactor productivity of the first half of the decade can be traced to the earlier investment boom. That panel employs a new data set based on research spearheaded by my colleagues Carol Corrado, Paul Lengermann, and Larry Slifman that calculates multifactor productivity for detailed industries. Along the x-axis, we measure for each of 60 industries the average rate of growth in investment over the 1995-to-2000 period relative to that industry's historical norm. On the y-axis, we plot the acceleration in MFP experienced by each industry from the 1995-to-2000 period to the 2000-to-2004 period. As seen by the red regression line, those industries for which the growth of equipment and software was unusually high in the late 1990s were more likely than others to experience a subsequent acceleration in multifactor productivity in the first part of this decade. Obviously, this is not a structural relationship and is meant to be impressionistic. But the recovery in equipment spending over the past few years leaves us optimistic that multifactor productivity can continue to grow at a rapid clip, though perhaps not quite at the pace registered over the first half of the decade. Sandy will now continue our presentation.

MR. STRUCKMEYER. Your next two exhibits detail the supply-side assumptions of the staff forecast, starting with the projection of structural labor productivity. In our analysis, structural labor productivity growth is defined as the increment to labor productivity that can be sustained over time. It is a medium- to long-run concept that attempts to eliminate the bulk of the cyclical influences on productivity growth. As shown on the top right, structural labor productivity growth can, in turn, be decomposed into the contributions from capital deepening, labor quality, and structural multifactor productivity growth.

As indicated in the middle left panel, the recovery that has occurred in the level of business capital spending over the past four years translates into a pickup in the January 31, 2006 20 of 106

growth of capital services, although not to the pace that prevailed during the boom years of 1995 to 2000. The contribution of capital deepening to structural productivity growth—that is, the product of the growth in capital services per hour and the capital share of output—picks up gradually over the next two years. Note in the middle right panel that the bulk of this contribution comes from investments in information technology—as has been the case for all of this decade.

In contrast, the pace of growth in structural multifactor productivity—shown in the bottom left—has greatly exceeded the pace over the 1995 to 2000 period. This is just the manifestation at the aggregate level of the driving forces shown in Dave's scatter plot. However, we have allowed for slightly slower growth in 2006 and 2007 than in the preceding years as the marginal gains from additional organizational improvements and embodied technical change begin to wane. In addition, as noted in the right, we've seen some leveling-off in expenditures on research and development lately, which may well manifest itself in a somewhat slower pace of technological change in the years ahead.

Your next exhibit presents our estimates of potential output growth. As shown on line 1, we expect potential real GDP to expand at a 3½ percent pace over the next two years. As you can see on line 2, total potential hours worked—or trend labor input—is expected to slow somewhat. Although population growth is expected to be well maintained, the trends in both labor force participation and the average workweek are offsetting factors. As we've noted before, the downtrend in the labor force participation rate (shown in the middle left) mainly reflects the changing demographic composition of the workforce. The estimated trend in the workweek (in the middle right panel) shifted down in 2001—reflecting the introduction of NAICS in the payroll survey—and is expected to fall at about the same pace in 2006 and 2007 as it has since 2001.

The implications of these supply-side assumptions for the labor market are shown in the bottom two panels. Although nonfarm payrolls are expected to increase briskly in the near term, we expect gains to slow progressively over the next two years, reflecting the moderation in the pace of economic growth and the slower growth in the potential labor force that I just described. Indeed, we expect trend payroll growth to average only 100,000 per month over the next two years. As shown on the bottom right, the unemployment rate holds fairly steady this year and next. Given the pace of economic growth last year, our model of Okun's law was surprised by the extent of the decline in the unemployment rate—the gap between the red and black lines. We are expecting this error to be worked off over the course of this year, and in 2007 the unemployment rate moves in sync with the Okun's law simulation.

Your next exhibit presents the outlook for the growth in labor compensation. In the January Greenbook, we projected hourly compensation, as measured by both the ECI and P&C compensation per hour, to accelerate over the next two years. We think that continued strong growth in structural labor productivity will elevate wage demands, while labor market slack will be a relatively neutral influence on

January 31, 2006 21 of 106

compensation growth. Inflation expectations to date have remained anchored, but we have allowed for some pass-through into wages of the higher price inflation in 2004 and 2005.

This morning's reading on the ECI showed that hourly compensation in private industry increased 3 percent in the 12 months ending in December—the same as the judgmental projection in the January Greenbook. However, as you can see in the bottom left, our econometric equation for the ECI has overpredicted the actual growth in compensation since the middle of 2004, possibly suggesting that our estimated NAIRU of 5 percent is too high. In looking at the range of econometric wage and price models that we follow, the evidence on a change in the NAIRU is mixed. We have noted a tendency for some models to overpredict inflation lately. But as shown in the bottom right, the random nature (and the smaller absolute size) of the errors from one of our better reduced-form price equations does not yet suggest the need to lower our estimate of the NAIRU. I will return to the implications of this assumption later in my remarks.

Your next exhibit presents the outlook for inflation. Recent readings on headline inflation (shown in the top left) have remained at the high end of the elevated range that has prevailed since 2004. Those readings reflect mainly the direct effects of higher energy prices, which have increased at an average pace of 20 percent per year over the past two years. In contrast, we have seen some moderation in the pace of core consumer price inflation, with the twelve-month change in both the core PCE and the core CPI indexes slowing to about 2 percent.

Looking ahead, we have had to cope with somewhat greater pressures on inflation in this Greenbook. These pressures stem mainly from the upward revisions to our projections of crude oil prices and core nonfuel import prices that Dave discussed. As a result of these changes, the moderation in PCE energy prices is somewhat less than in past Greenbooks, and we anticipate greater spillovers on the prices of other industrial materials (shown in the middle right). On net, we expect core PCE prices (line 4 in the bottom left panel) to increase  $2\frac{1}{4}$  percent this year before decelerating to  $1\frac{3}{4}$  percent in 2007 as the influence of these cost shocks recedes.

The bottom right panel shows two alternative simulations that address key risks to the inflation outlook. The adverse shocks simulation assumes that the economy is hit with additional increases in the prices of oil, non-oil imports, and industrial materials that match those that prevailed in 2004. Under the assumption that the funds rate remains on its baseline path, core PCE inflation moves up to about  $2\frac{1}{2}$  percent in 2006 and 2007 (the red line). In contrast, as I noted earlier, our estimate of the NAIRU may be too high, and a second simulation examines the implications of a  $4\frac{1}{4}$  percent NAIRU—essentially one standard deviation below our current estimate. Under this assumption, core PCE price inflation falls to  $1\frac{1}{2}$  percent by the end of next year. Even though these two simulations embody some fairly large differences in assumptions from the Greenbook baseline, both simulations remain well inside a

January 31, 2006 22 of 106

70 percent confidence interval about our forecast. Nathan will now continue with our presentation.

MR. SHEETS. Your first international exhibit focuses on the dollar. As indicated by the red line in the top-left panel, despite widening U.S. external imbalances, the dollar rose strongly against the major currencies through much of 2005. As seen on the top right, against the euro and the yen, the dollar has recorded net gains of more than 10 percent over the past year, even after tailing off some during the last two months. The dollar's rise against these currencies occurred as interest rate differentials (shown on the bottom left) moved strongly in favor of dollar assets, and market commentary has pointed to this as a key factor supporting the dollar. Against the Canadian dollar, however, the greenback has moved down since mid-2005, and—as displayed on the bottom right—the dollar has also fallen against an array of emerging-market currencies, as market confidence in these countries has climbed. On balance, the broad nominal dollar has strengthened about 1¾ percent over the past year.

As shown in the top panels of exhibit 10, the dollar's resilience last year came in the context of a shift in the composition of reported U.S. financial inflows, away from official financing and toward private financing. In 2005, foreign official inflows (line 1 on the left) were down sharply from their 2004 pace. A plunge in official inflows from the G-10 countries (line 2) led this decline, as the Japanese authorities ceased intervening in foreign exchange markets. In contrast, inflows from emerging Asia (line 3) continued to move up, reflecting massive reserve accumulation by China.

Purchases of U.S. securities by private foreigners (the top right panel) surged last year to more than \$700 billion. All major categories of instruments saw increased foreign purchases, with particularly large gains in Treasury securities (line 2) and corporate bonds (line 4).

The positive sentiment toward the emerging market economies, which was seen in foreign exchange markets, has also been manifest in global debt markets. As shown on the bottom left, the EMBI+ spread—which had hovered above the U.S. double-B corporate spread in recent years—cut below the double-B spread in mid-2005 and has now sunk to historical lows of just above 200 basis points. These favorable conditions, however, have not triggered a rise in external borrowing. As shown on the bottom right, net issuance of international debt securities by the emerging Asian economies has remained stable over the last year or two, and the Latin American countries have been paying down debt on net. Moreover, a sizable fraction of these economies continue to run current account surpluses.

Your next exhibit focuses on the outlook for activity abroad, which in our view is quite favorable. As shown in line 1 of the top left panel, we estimate that total foreign growth in the second half of last year climbed to 4.1 percent, as growth in the emerging market economies (line 6) exceeded 6 percent. Going forward, we expect the foreign economies on average to expand at a strong pace of  $3\frac{1}{2}$  percent. Recent

January 31, 2006 23 of 106

data have pointed to renewed signs of life in the euro-area economy (line 3), particularly in Germany, as strengthening in the export sector appears to have jump-started investment. We expect this impetus eventually to feed through to increased employment and consumer spending. Accordingly, we have marked up our forecast for the euro area and now expect growth there to remain near the 2 percent pace posted in the second half of 2005. Our forecast for Japan (line 4) calls for the expansion to broaden and for growth to remain above our estimate of potential. As shown in the middle left panel, over the past decade, Japanese corporations have dramatically reduced their debt burdens (the blue line). As balance sheets have strengthened, business investment (the black line) has risen and labor market conditions (the red line) have improved. More recently, as shown on the right, urban land prices—after many years of sharp contraction—appear to have stopped falling, and bank credit seems to be following a similar pattern. These developments suggest that conditions in the Japanese financial sector may finally be normalizing.

The bottom panels focus on China. Over the intermeeting period, the Chinese authorities reported that GDP in 2004 was \$280 billion (or 17 percent) larger than they had previously realized. Given these revisions, China's GDP last year now appears to have exceeded that of France and the United Kingdom, making China the world's fourth-largest economy. Other recent data indicate that China's trade surplus (displayed on the right) jumped to \$100 billion in 2005, as import growth declined sharply. Returning to the top left panel, this deceleration in imports did not reflect a slowing in the overall pace of Chinese activity last year, as GDP growth (line 8) remained near 10 percent. We see growth there notching down to around 7¾ percent in 2006, as the authorities are expected to implement administrative measures to restrain investment.

As displayed in the top right panel, average foreign inflation is projected to remain well contained, cycling near 2½ percent through the forecast period. Inflation rates in the foreign industrial countries are seen to step down in mid-2006, as the run-up in oil prices plays through.

For the emerging market economies, oil price increases typically pass through into consumer prices more slowly, as a number of these countries have price controls or subsidies in place that temporarily cushion the upward pressure on prices. As such, the rise in oil prices should continue to push up consumer price inflation through the next few quarters, but these pressures should abate in 2007.

The top panels of exhibit 12 focus on trade prices. As shown on the left, the spot price of West Texas intermediate (the black line) has surged about \$20 per barrel over the past year and now trades above \$65 per barrel. Oil prices have been driven up both by strong global demand and by concerns about the reliability and adequacy of global supplies. Recent developments in Iran, Iraq, and Nigeria have further intensified these concerns. Tracking futures markets, our forecast calls for the price of WTI to remain elevated through the end of 2007. Nonfuel commodity prices (the red line) have also risen sharply over the past year, as metals prices have surged in

January 31, 2006 24 of 106

response to strong global demand. In sync with futures markets, our forecast calls for commodity prices to flatten out near current levels, as supply responses help cap further price rises.

The center panel displays our projection for the broad real dollar. After rising somewhat on balance last year, the dollar is projected to depreciate slightly, at an annual rate of about  $1\frac{1}{3}$  percent, through the forecast period. We see the expanding current account deficit and associated financing concerns—as well as monetary tightening by some foreign central banks—as likely to be sources of downward pressure on the dollar.

Core import prices (the right panel) spiked in the fourth quarter, driven largely by a surge in natural gas prices following the hurricanes. Given that natural gas prices have already retreated, the run-up in core import price inflation should quickly unwind. Smoothing through these fluctuations, we see core import price inflation moving down to around 1 percent by early next year, consistent with flat commodity prices and only modest dollar depreciation.

Recent data on U.S. nominal trade (the bottom left panel) indicate that the trade deficit has widened further. In October and November, exports of goods and services (line 2) increased \$17 billion, led by a rise in capital goods exports (line 3), owing in part to a rebound in aircraft exports following the Boeing strike in September. Notably, exports of industrial supplies in October and November (line 4) were down relative to the third quarter. A large share of U.S. firms that produce these goods are located in hurricane-affected areas, and their production has been temporarily impaired. As shown on the right, this circumstance is highlighted by a sharp drop in real exports from several industries that were particularly affected by the hurricanes.

Nominal imports of goods and services (line 6 on the table) rose a hefty \$80 billion in October and November, notwithstanding soft growth in consumer goods (line 7) and capital goods (line 8). The recent rise in imports primarily reflected large increases in industrial supplies (line 9) and oil (line 10). These gains were due both to higher import prices, particularly for oil and natural gas, and to rising import quantities (which have substituted for impaired domestic production). Notably, as seen on the right, real imports have risen sharply in some of the same hurricane-affected industries in which exports have been particularly weak.

As shown in the top left panel of your final international exhibit, we estimate that the growth of U.S. real exports of goods and services (the blue bars) dipped during the second half of 2005, as the hurricanes contributed to softness in goods exports and as last year's dollar appreciation reduced the stimulus to services exports. Imports (the red bars), in contrast, expanded at a solid rate in the second half of last year, with a boost from the hurricanes. This pattern is expected to reverse in the first half of 2006, with exports recovering from the effects of the hurricanes and imports of oil and industrial supplies moderating. Thereafter, imports and exports are projected to grow at comparable paces, in line with solid U.S. and foreign growth and with the

January 31, 2006 25 of 106

dollar projected to depreciate only mildly. As shown by the black line in the top right panel, the contribution of net exports to U.S. GDP growth in the second half of last year is estimated to have been around negative 0.6 percentage point, but it is projected to swing slightly positive in the first half of this year. Subsequently, the subtraction due to net exports should run at roughly ½ percentage point; imports and exports grow at comparable rates, but with imports more than 50 percent larger than exports, a sizable subtraction from growth results.

As shown in the middle left panel, the U.S. current account deficit widened from about \$150 billion in 1997 to \$780 billion in the third quarter of last year. Over the forecast period, we see the deficit increasing further, to over \$1 trillion, or about 7½ percent of GDP. The bottom panel provides some additional perspective on the widening of the current account deficit. As shown in the first column, from 1997:Q1 to 2001:Q4—a period of dollar appreciation—the current account balance fell \$217 billion, which was more than accounted for by a decline in the non-oil trade balance. Over the next four years (the second column), the current account balance dropped another \$421 billion, largely because of a continued decline in the non-oil trade balance (despite a net depreciation of the dollar) and a sharp rise in oil imports. As shown in the last column, we expect the current account deficit to widen nearly \$300 billion over the forecast period, with all four major components contributing to the decline. Notably, net investment income is expected to fall sharply, as growing U.S. indebtedness and rising short-term interest rates push up our payments to foreigners.

The middle right panel shows that our current account projections for 2006 and 2007 are markedly gloomier than those of other forecasters. Thus, there is a distinct possibility that investors will be surprised by the extent that the current account deficit widens. We see this as representing an important downside risk for the dollar.

MR. STOCKTON. The final exhibit presents your economic projections for 2006 and 2007. The central tendencies of those projections anticipate real GDP to increase about 3½ percent this year and then to run between 3 and 3½ percent in 2007. Forecasts of core PCE price inflation are centered on 2 percent this year and between 1¾ and 2 percent in 2007. Meanwhile, the unemployment rate is expected to be between 4¾ and 5 percent both this year and next. I would appreciate receiving any revisions in your forecasts by the close of business Friday. My colleagues and I would be happy to take any questions that you might have.

CHAIRMAN GREENSPAN. In exhibit 6, the average workweek is something of a puzzlement. I'm curious to get a sense of what is our now retrospective explanation of the sharp fall in the year 2000-01 and the failure to start back up as the economy picked up. Are we looking at an age or a demographic mix?

January 31, 2006 26 of 106

MR. STRUCKMEYER. Well, the 2001 effect was the incorporation of the NAICS classifications into the payroll survey. So it was just a methodological change that was realized.

CHAIRMAN GREENSPAN. So, really, we never had such a drop. The series is just discontinuous.

MR. STRUCKMEYER. It's discontinuous. If you look at the two slopes, they're about the same before and after, but there is discontinuity in 2001.

CHAIRMAN GREENSPAN. We know labor force participation changes as people move into different age brackets. So if we have data of average hours by age, do we have any judgment as to whether their average workweek hours change as well?

MR. STRUCKMEYER. Not to my knowledge.

MR. STOCKTON. I don't know either, Mr. Chairman. I would suspect, though I don't really know, that workweeks would tend to decline later in an individual's life cycle, certainly relative to the prime age working years.

CHAIRMAN GREENSPAN. Individuals also may be more affluent so that they have an ability to actually—

MR. STOCKTON. Or affluent and more likely to be taking on part-time work in retirement. [Laughter] I'm not suggesting that your workweek is likely to fall; I'm sure it's going to maintain its current level! [Laughter]

CHAIRMAN GREENSPAN. I object to that! [Laughter] I mean, there are data by age. Certainly in the household survey we pick up something.

MR. STRUCKMEYER. Yes.

CHAIRMAN GREENSPAN. I'm just curious. President Santomero.

January 31, 2006 27 of 106

MR. SANTOMERO. I wanted to go to the housing issue. In the projection in the Greenbook, as I understand it, you've got housing prices going up at about a 5½ percent rate as compared with last year's number, which I think is 12 percent. We've been looking at the sensitivity of what happens to our GDP growth rate in '06 and '07 to the extent that housing prices stay flat. Our numbers suggest that a flat housing price associated with the decline in residential investment would shave about ½ percentage point off GDP in '06 and about 0.6 or 0.7 if you add the consumption effects. Does that sound like a reasonable sensitivity to you?

MR. STOCKTON. That sounds like a reasonable sensitivity. As you know, we have presented this effect in the past. It's a little larger than the effects that we get when we run our model, which would be measured more around ¼ percentage point to ½ percentage point. Now, you may recall that last June John Williams presented some simulations of various housing-price scenarios. Our relatively small effects come from just simulating a lower path for the price of housing, and as you know, our model has a relatively low marginal propensity to consume out of housing wealth, one that is similar to that out of overall household wealth.

It's not difficult to imagine upping those effects. If one wants to assume that, instead of the three and a half cents on the dollar effect that we have incorporated in our model, the marginal propensity to consume was around five to seven cents on the dollar, those effects would obviously be increased. The second potential channel that our straightforward model simulations don't account for is that a lower path for housing prices could be accompanied by some hit to consumer sentiment. There would be an outsized effect on consumer spending if households really became more pessimistic given the downturn in what is an asset with a high profile in their portfolios. And the third possibility that John explored in his simulations was related to one of the alternative simulations we show this time around: If weakening in house prices and housing activity occurred

January 31, 2006 28 of 106

when the term premium was widening back out, you would then have the effects not only directly on the housing-sector side, which could be amplified, but also on other forms of interest sensitive spending.

So I think there are some pretty wide confidence intervals. The numbers that you cited are bigger than our standard simulation, but seem reasonable and in the ballpark if one wants to make a few adjustments in some of the assumptions that we made. As I contemplate our outlook and the things that I worry about the most on the domestic side of the economy, I'd say the housing sector is clearly one of the biggest risks that you're currently confronting.

MR. SANTOMERO. Thank you.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Nathan, if you look at the differences between the Greenbook forecast of the path of the external balance and those of other forecasters, can you summarize for us what the major sources of differences are? Are they about the exchange rate assumption, or are they about something else?

MR. SHEETS. I think the source varies from forecast to forecast. One difference across these forecasts relative to ours is in the oil price. The other forecasters are in the \$50-\$55 range, whereas we have an oil price of \$65 to \$70. So that's a piece of it. Looking at the assumptions embedded in these forecasts pretty carefully, the one forecast that has a much sharper depreciation of the dollar than what we've written down is the Global Insight forecast, which shows the dollar falling quite dramatically over the next year or so. But I don't find significantly different assumptions about the exchange rate in the other forecasts. So I guess the bottom line is that I think a lot of this difference is just a difference in models, and we're confident that—if you give us an

January 31, 2006 29 of 106

exchange rate, relative prices, and so forth—we're pretty good at mapping those underlying variables into a path for the current account.

CHAIRMAN GREENSPAN. Any further questions for our colleagues? If not, before we go to the general discussion, because of the unusual nature of this particular one-day session with various timing problems, I just calculated that, in the eighteen years I've been here, we've gone from an average presentation of three minutes to one of six minutes. [Laughter] The drift has been inexorably upward. And I will suggest to you that, unless we are somewhat unusually restrained today, we're going to run way over what our luncheon plans are, and we will be forced to call them dinner. [Laughter] So may I suggest, if at all possible, that you try to restrain the time that you're employing on this particular occasion. With those restrictions, who would like to start off? [Laughter]

MR. MOSKOW. With restraint, Mr. Chairman, most of our contacts this round were positive about current business conditions. However, they were cautious about the prospects for '06, largely because they didn't see any obvious drivers for growth.

With regard to current conditions, national labor markets appear to be solid. Both of the temporary-help firms headquartered in our District reported that their business was very good. Of course, they mentioned that it was softer in the Midwest, primarily because of the problems of the Big Three automakers and their spillovers and because of suppliers in the regional economy. One mentioned that Michigan was the only state in which he had seen a drop in the demand for business and technical workers. I mentioned last time that things could get worse if the Delphi negotiations result in a strike, and all three parties—Delphi, UAW, and GM—are talking. Delphi has toned down its rhetoric, and the deadline has now been pushed back to February 17.

January 31, 2006 30 of 106

Turning to cost and price pressures, wages and benefits continued to increase at a moderate pace. With regard to other costs, I heard the usual concerns about prices for energy and energy-related inputs in shipping, but the reports about other material costs were mixed. There was one interesting case in which capacity considerations were showing up in higher prices, and that's the airline industry. United reported that the reduced capacity in the industry has made it easier for them to raise prices, particularly when it comes to passing through fuel costs. And, as you know, they are scheduled to exit bankruptcy shortly.

As I mentioned in the past, I'm concerned about the high amount of liquidity circulating in financial markets. For example, one of our directors who heads a major private equity firm noted that such funds were having no trouble attracting investors. He said that the amount of new money invested in private equity firms is expected to expand 50 percent this year, and there is a slightly ominous look to some of the new investors, such as underfunded state pension funds that are "reaching for return," as he described it. Similarly, early last week we held our semiannual meeting of academics and local business economists, and I heard comments about unusually high liquidity levels from several economists who work for investment firms and commercial banks. And as we all know, risk spreads are quite low by historical standards. So I worry that there's a lot of money chasing investments out there, and that this may have driven the price of risk down too far.

In the national outlook, even with the weak fourth-quarter numbers we continue to expect that economic activity will expand at a solid pace similar to that in the Greenbook. We see growth at or slightly above trend over the next two years and the unemployment rate remaining around 5 percent. Of course, if the fourth-quarter sluggishness spills forward, we would have a more complicated set of issues to deal with, but I agree with the staff and expect that growth will bounce back this quarter. With regard to prices, we think that core PCE inflation will average close to

January 31, 2006 31 of 106

2 percent over the forecast period. The outside economists at our meeting last week generally agreed with this outlook, although a couple predicted that GDP growth would fall somewhat below 3 percent in 2006.

Most of these economists thought that we would raise the fed funds rate to 4\% to 5 percent and then go on hold. As always, we're going to have to take a hard look at the data and forecasts before we decide what to do. Inflation could moderate further. We've been pleasantly surprised at firms' ability to absorb cost shocks. If they continue to do so, we could be looking at core PCE inflation rates heading down this spring. In that event, inflation risks would be diminished, and there would be fewer risks in ending the current rate cycle. But there's a good chance that recent cost increases will pass through, and we'll experience a repeat of last winter's uptick in core inflation. Moreover, I can see some plausible outcomes for growth that would pressure resource utilization. And in that event, we'd be looking at a forecast for core inflation that was stuck above 2 percent. I think this would be a problem. With inflation remaining at such rates, we could begin to lose credibility if markets mistakenly inferred that our comfort zone had drifted higher. When we stop raising rates, we ought to be reasonably confident that policy is restrictive enough to bring inflation back toward the center of our comfort zone, which I believe is 1½ percent. And as I read the long-run simulation in the Bluebook, it seemed to say that the funds rate needed to rise a bit over 5 percent by late 2006 to bring core inflation down to 1½ percent within a reasonable period. So for today, we should move forward with an increase of 25 basis points, and we should allow ourselves enough flexibility so that policy can either stop or continue moving, as the situation warrants.

CHAIRMAN GREENSPAN. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. Recent data on economic activity, as summarized by the fourth-quarter GDP figure, have been surprisingly weak. But there are good

January 31, 2006 32 of 106

reasons to believe that much of the softness will prove temporary, so I tend to agree with the Greenbook and other forecasts in expecting a rather sharp rebound in the current quarter.

That said, I want to sound a note of caution. This view is based on incomplete data for the fourth quarter and a paucity of information concerning activity in the first quarter. It is not inconceivable that the weak numbers for the fourth quarter could presage a more-prolonged, sluggish phase as the lagged effects of past policy tightening and higher oil prices take effect. This caution is heightened by my concern that the economy faces some pretty big downside risks, especially having to do with the interrelated issues of possible overvaluations in housing markets and low term premiums in bond markets. These risks are highlighted by the alternative simulations in the Greenbook concerning a rise in the saving rate and a higher term premium. In summary, I see the Greenbook's view of real activity for this year as very reasonable, but downside risks to that forecast give me pause.

Turning to inflation, core PCE inflation over the past twelve months—at 1.9 percent—has come in higher than I would like to see. But assuming that growth slows to trend later this year, my outlook for inflation in 2006 is more optimistic than the Greenbook. One reason stems from work our staff has done on the extent of pass-through from energy prices to both labor compensation and core price inflation. As I've said before, the evidence suggests to us that there has been relatively little pass-through since the early 1980s, perhaps due to the credibility of our commitment to the stability of core inflation. Under our assumption of very little pass-through, we expect the core PCE price index to rise around 1¾ percent, both this year and next. The Greenbook shows an increase of 2¼ percent this year, presumably reflecting larger energy-price pass-through, and then a drop to about 1¾ percent in 2007 as the effects of energy prices subside. So though I differ with the Greenbook on inflation in 2006, over the longer period I think we're about on the same page.

January 31, 2006 33 of 106

So as I look at the total picture, I would say that the overall outlook is quite positive. The economy is near full employment with real GDP tending toward trend-like growth. Core inflation is within a reasonable range but a bit on the high side. Needless to say, it's fitting for Chairman Greenspan to leave office with the economy in such solid shape. And if I might torture a simile, I would say, Mr. Chairman, that the situation you're handing off to your successor is a lot like a tennis racquet with a gigantic sweet spot. [Laughter]

Positive though the situation is, it also obviously raises the issue of how much higher the funds rate needs to go to keep the economy on this desirable trajectory. There are a number of ways of looking at this question, all yielding similar answers. First, a funds rate of 4½ percent rests right near the center of the range of estimates for the equilibrium funds rate. Along the same lines, our staff ran simulations of FRB/US to calculate the net effect of monetary policy actions over the past several years on real GDP growth. The results are that, after adding importantly to growth over the last few years, past policy accommodation is roughly neutral in terms of growth this year and next. A second approach is to compare a funds rate of 4½ percent with the recommendations of Taylortype rules. Such calculations suggest that a 4½ percent funds rate this quarter is a bit on the tight side now but should be about right later this year under the Greenbook forecast. The long-run simulations in the Bluebook are a third method to judge the stance of policy. These simulations show the funds rate optimally peaking at a little over 5 percent, well above where we are now. But a major factor accounting for this relatively high peak is the Greenbook's assumption, incorporated in the Bluebook simulation, that energy pass-through pushes up core PCE inflation to 21/4 percent this year. And as I've emphasized, we're not convinced that this much pass-through is likely, and our lower inflation forecast implies a lower peak for the funds rate along an optimal path.

January 31, 2006 34 of 106

Taken together, then, these approaches suggest to me that if we tighten policy at this meeting, as I think we should, we will be close to the appropriate peak in the funds rate based on what we know now. As for the future path of the funds rate, I believe it should be highly dependent on unfolding events and cannot be prejudged with any degree of confidence. So the bottom line is that we need to position ourselves for flexibility in our policy choices going forward.

CHAIRMAN GREENSPAN. Thank you. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. Consistent with the national economy, overall activity in the Third District slowed somewhat more than expected in the fourth quarter. Despite this slowing, the general view in my District is that our regional economy is likely to expand at a moderate pace in 2006.

Payroll employment continues to expand in our three states, but at a more moderate pace than we saw in the first half of 2005. Overall, market conditions remain firm. The three-state unemployment rate ended up at 4.8 percent, slightly lower than the national rate. Regional manufacturing activity continues to expand at a moderate pace. The index of general activity in our manufacturing survey declined to plus 3.3 in January, its lowest level in seven months. But the indexes of shipments, new orders, and employment were all up. This divergence is unusual. Typically, they move together. When they do diverge, I tend to put more weight on the shipments and new orders indexes, as these reflect the respondents' own firms rather than the opinions about general economic conditions. In addition, the fact that our firms have not yet changed their capital spending plans for 2006 suggests that their outlook remains positive.

Retail sales in our District are rising moderately. Retailers still express concern about the potential depressing effect of higher gasoline and heating costs on consumer purchases in 2006.

Our auto dealers have not fared as well. In fact, our District has seen a decline in automobile sales.

January 31, 2006 35 of 106

Growth in construction is one of the question marks in the 2006 outlook. In our District, nonresidential construction continues to improve. In fact, the office market absorption rate is rising in the Philadelphia metropolitan area, and office vacancy is declining in both the city and the suburbs. By contrast, over the past month or so, we have continued to receive anecdotal reports that a slowdown in residential construction may be at hand. Real estate contacts report that house-price appreciation has slowed or even ceased, and there has been an increase in inventories. These signs, however, seem to point to a softening of activity, not to a sharp drop.

We have received some welcome indication of a moderation in price pressures in the District. Our survey measures of prices received and prices paid were down in January and well below their October peaks. Expected price increases also declined sharply. The only caveat I would put on that statement is that the survey was taken before the most recent run-up in energy prices.

Turning to the nation, the advance fourth-quarter GDP report was quite a bit weaker than we were all expecting. That said, we, too, think it's too soon to conclude that the weakness seen in the fourth quarter is more than a temporary soft patch. Our forecast for GDP over the next two years is similar to that of the original Greenbook that we received this month. We expect growth to be on average around 3½ percent, near potential. We have a somewhat smoother path than the Greenbook since we expect the boost in activity from the rebuilding effort in the hurricane-afflicted areas to be more spread out than front-loaded.

We also see somewhat stronger employment growth next year than the Greenbook because we see somewhat stronger output growth in 2007. We project nonfarm payrolls to rise at an average of 160,000 a month this year, stronger in the first half as people displaced by hurricanes continue to return to work. We project an average increase in payrolls of about 150,000 per month next year.

January 31, 2006 36 of 106

The Greenbook employment projection is similar to ours in 2006, but the Board staff sees a deceleration next year to an average of about 100,000, as was pointed out in the presentation. However, our unemployment rate forecasts are similar, about 5 percent, because we see somewhat higher labor force participation.

We anticipate core PCE to rise a bit less than 2 percent in 2006 and then to accelerate to 2 percent in 2007, reflecting a modest acceleration in unit labor costs. In contrast, the Greenbook sees a slight deceleration in core inflation over the forecast period.

Our forecast is predicated on being near the end of the tightening cycle. Exactly where we stop is yet to be determined; the data will tell the Committee. But all of these data suggest that we are closing in and we are close to being done. For this meeting, I think it's prudent for us to do what the market expects and make another move of 25 basis points. But I think we also want to be in a position to pause if that is appropriate, given the incoming economic data.

Of course, I will not be here for that interesting discussion. [Laughter] As you know, this is the last FOMC meeting that I will be attending as President of the Philadelphia Federal Reserve Bank. I am honored to have had the opportunity to lead that institution. Of all the experiences during my six years of service at the Fed, none was more challenging and more rewarding than serving on this Committee. I have enjoyed and learned from the first-rate staff of the Reserve Banks and the Board of Governors. I feel privileged to have served at a remarkable point in economic history. In my tenure, we've gone through a recession and a recovery, seen concerns shift from disinflation to inflation, moved to a record low funds rate, and then returned it to more-normal levels. And all of this was accompanied by an unprecedented degree of transparency in our policy discussions. I have also been inspired by the leadership shown by our Chairman, I may add, in forging a consensus from diverse opinions in periods of uncertainty and in fostering a collegial

January 31, 2006 37 of 106

atmosphere among us. I want to thank you all for an important part you've played in making my service at the Fed a rewarding experience. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. I should point out that a luncheon in the President's honor is planned at the March meeting. And I guess you and I will be looking from the sidelines, but neither one of us will know what happened at that March meeting until we get to it. [Laughter] Thank you for your nice remarks. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. There's not a lot new in New England. So I thought I'd just skip over my usual probably more-lengthy-than-necessary comments on the region. Let me just mention a couple of things, though. Employment growth is still slower, and income growth is still slower than that of the nation. Our regional unemployment rate went up rather than down over the past year, and we have seen some slowing in residential real estate markets. However, surprisingly enough, there seems to be a good deal of optimism in discussions we have had with people about business spending and about commercial real estate markets. So, for the first time in five or six years, we've actually had net absorption of space, both downtown and in the suburbs. That situation is making a big difference in the smiles on people's faces around town. I hope it means that New England is getting back and moving along the same trajectory as the nation.

Turning to the nation, we, like most observers, were surprised at the modest growth rate of the economy in the fourth quarter. But we, like almost everybody else, believe that the reduced pace of government spending and smaller-than-expected inventory investment that affected the fourth quarter are likely to be temporary and reflect issues of timing rather than overall economic strength. Thus, we, too, anticipate a slightly stronger first quarter this year than we had before. But our forecast takes the same basic trajectory over the balance of '06 and '07—that is, strength in the

January 31, 2006 38 of 106

first half of '06 and then moderation as the effect of tighter monetary policy, cooling housing markets, and less fiscal stimulus takes hold. This is the same trajectory as that in the Greenbook.

However, as we look at GDP, our forecast for '07 is slower—½ percent or a little bit less—than the forecast for '06, reflecting an expected outright decline in housing investment. We also see inflation trending off both this year and next, with core PCE inflation never above 2 percent over the two-year period. I mean, not "never," which is a strong word, but at the points we're mapping. Some of this difference in price pressures is accounted for by a sense of a somewhat greater supply of labor resources, as reflected in a slightly lower NAIRU and a higher labor force participation rate.

Looking at these forecasts and assessing all the data and anecdotal inputs I have received since the last meeting, I am struck by a couple of things. First, these forecasts, and the vast majority of those available from other sources, describe an almost ideal outcome. U.S. demand is strong but slowing, as consumers save more and borrow less. Fiscal stimulus diminishes, business spending remains solid, employment grows, inflation edges off, and foreign growth is spurred by domestic demand at last and acts to create some export growth, though we continue to have a widening current account deficit. If these forecasts were to be realized, it would truly be just about the best of outcomes, and I would agree with President Yellen—a major sweet spot as the Chairman hands over the reins.

But that scenario sort of begs the question of risks, both large and small, and how they are balanced. We could certainly be surprised by new energy shocks or geopolitical events of such magnitude to cause financial turmoil and consumer and business retrenchment. We could also witness the turbulence that could accompany a sharp unwinding of the nation's ever-growing external deficit. But you don't have to focus on major upsets. Risks of a lesser proportion loom as well. We could very well be wrong about the remaining capacity in labor markets, and the resulting

January 31, 2006 39 of 106

upward pressure on wages and salaries could create a more rapid pace of inflation, particularly given the solid pace of external growth and pressures on a range of commodity prices. To date, however, the growth of wages and salaries has been on the slow side, particularly relative to productivity, and there is little evidence that firms believe they have the pricing power to pass on much more than energy surcharges. Indeed, their profit margins suggest that they have a cushion against increases in input costs. Alternatively, the impact of a cooling housing market could take a larger bite out of consumption than we now expect and cause a greater-than-projected, though welcome, increase in personal saving. This would, of course, slow the economy from baseline and damp price pressures. We haven't seen this yet either, but it could be just as likely as missing on the inflation side.

Thus, as I look at both the upside and downside risks, they seem to me to be more balanced than they have been. As some evidence of this, both the Greenbook and the fed funds futures markets anticipate that policy is near a tipping point—move a bit more now and then retrench in late '06 or early '07.

I also find myself beginning to wonder about the cost of being wrong. When policy was arguably much more accommodative, it seemed to me that letting inflation get out of hand might be harder to deal with and ultimately more damaging to the economy than if growth slipped a bit. That may still be true. But just as our credibility regarding price stability is important in setting market expectations so, too, is some sense that policy will be supportive of growth when the threat of rising inflation is less imminent. In short, we need to be credible about achieving both our goals. At this point, another nudge toward a policy rate that neither stimulates nor restrains the economy seems appropriate. But the need for further moves seems to me to be increasingly driven by the incoming data.

January 31, 2006 40 of 106

#### CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Mr. Chairman, I took note of the two Davids' forecast of 4.7 percent growth in the first quarter. Especially against President Yellen's comments, it brought to mind the name of one of Henry Jerome's albums on the Decca label called "Brazen Brass." That is, some might consider brazen or even brassy that it jibes or, in this context, jives with what I'm hearing anecdotally both in our District and nationwide—though we have only three and a half weeks of observations and the year-end to look at.

Very quickly to sum up these observations, the CFO of UPS put it this way: "The economy feels much better than what I read." UPS reports a very strong December adjusted for seasonality, and January has stayed strong. Over the year-end in the recent past, they have had only one holiday peak day of processing 20 million shipments. They had three at year-end of more than 21 million. Burlington Northern–Santa Fe's volume for the first three weeks of '06 is up 9 percent year over year. Interestingly, they just auctioned off their entire lumber-carrying capacity for the year at an 8 percent premium over current market. Texas Instruments reports a positive book-to-bill ratio, which is a very rare thing coming out of the fourth quarter. They find that they underinvested relative to demand and report a seven- to ten-day delivery delinquency rate. As the CFO says, "We have stopped scratching our heads about demand, and we're just taking it all in."

The CEO of Wal-Mart U.S.A. reports that "the consumer hasn't hidden" as expected. It's true that traffic is down, but average purchases are up in the Southeast and Texas, and the West is strongest in overall demand, aided by the warmest winter by their calculations in 112 years. The CEO and the top managers met with their 5,000 suppliers the week before last in Kansas City, and he reported that the suppliers described themselves as "upbeat." Wal-Mart and others report what we're hearing from the railroads, the shippers, and other retailers—all of which lends verisimilitude

January 31, 2006 41 of 106

to what was evident if you parse the Beige Book. And that is that the rim—from Richmond down through Atlanta to the State of Florida and then, of course, the "uber" states across Texas and up to California and the West Coast—is enjoying robust growth. To the extent that there's weakness, it appears to be in the north central and northeastern regions.

On the price front, Dick Evans, on our board, of Cullen/Frost, a very astute banker, says that he "keeps hearing people talk about potential inflation, but the economy seems to be able to pull it out of the hat." Wal-Mart International reports no pricing power other than in resin-based products. The CEO marvels at how the world continues to, as he puts it, "replace technology at lower and lower prices." Further up the retail chain, Penney's CEO reports no price inflation in home furnishings and continued price deflation in apparel. And on the two subjects for which I reported price pressures before, the CEO of DX Services, a large chemical company, reports that PVC prices have fallen off because of overproduction but the prices of the key building blocks of chlorine and ethylene are falling. "There's no pricing on the upside," according to that CEO. And as for my other favorite subject of diapers, incidentally, Proctor & Gamble and Kimberly Clark have rolled back their price increases of 5 percent.

Our shipping contact at Northern Navigation reports that Panamax rates—and Panamax is the key fleet of bulk carriers—are now down to \$16,700 per day from \$17,300 in December, which was down 35 percent from the average for the year of '05. The container fleet will absorb a 14 percent increase in fleet size per year for the next three to four years driven largely by what one could consider Chinese ego because they have now entered the building market in size. And interestingly, UPS worries that, if this continues, they will come under price pressure to decrease air freight rates. Despite fierce demand and delivery delinquencies, Texas Instruments reports that it has slowed down its price increases.

January 31, 2006 42 of 106

So, Mr. Chairman, we have forecast a core PCE inflation of 2 percent for the year, and we feel comfortable with it. I started with Henry Jerome. Let me conclude with another Henry, the Fifth, at least as written by Shakespeare. I've been honored to serve with you, Mr. Chairman, the least time of anybody at this table. In Alfalfan terms, I'm just a sprout in the crop of otherwise experienced men and women. But I'm sure they would agree with me, without getting too dramatic, about the appropriateness of Henry V's remarks at Agincourt—and I'll rephrase them—economists and bankers now asleep (remember these are bankers) shall think themselves accursed that they were not here. I consider myself privileged to have been here, Mr. Chairman. This isn't Agincourt, but it's important. I've served under two saxophone players now, [laughter] and I would say without question, you're a leader of the very best kind, and I thank you for your leadership.

CHAIRMAN GREENSPAN. Thank you very much. And the last time I spoke to Henry V [laughter] I got a view of his notions of strategy. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Fifth District economic activity continued to advance broadly in December and January. Service-sector employment and revenue strengthened, and retailers reported generally strong sales and a pickup in hiring. In manufacturing, the signals are mixed. Shipments flattened out in December and turned down in January, and our new orders index turned negative as well. At the same time, we've seen a very sharp rise in our index of expected manufacturing shipments six months out. Major swings in this index do a pretty good job of predicting subsequent upturns in orders and shipments. The last time we saw a rise nearly this steep was at the beginning of 2002, and a sharp rebound in orders and shipments soon followed. While the figures for prices paid and prices received for both manufacturing and services have come down off their November highs, they remain noticeably elevated, and measures of expected price trends have moved up over the past two months.

January 31, 2006 43 of 106

On the national economy, until I saw the fourth-quarter GDP report, I was thinking that economic growth was on pretty solid footing. Friday's report came in weaker than expected, of course, but as Dave Stockton mentioned, it appears plausible that several temporary factors are at work. So I continue to think that prospects for economic growth are pretty good this year. Both employment and consumer spending are likely to continue expanding at a healthy pace, and the fundamentals for business investment point toward fairly robust spending growth.

At our last meeting, I, like many others, believed that the threat that energy-price increases would pass through to core inflation and inflation expectations had diminished since the immediate aftermath of Hurricane Katrina. However, I wasn't convinced that the threat was entirely behind us, and unfortunately, my concerns on that score remain. Oil prices have nearly returned to their September highs. The fourth-quarter core PCE price index came in at 2.2 percent, 0.3 above the Greenbook's estimate, and the Greenbook has reversed course and marked up the '06 inflation forecast a bit. The staff is now expecting core PCE inflation to rise to 2.3 percent in the middle of 2006 and not to fall below 2 percent until 2007 and then only slightly below. This forecast represents a bulge that is somewhat more extended than I would like to see. So, for today, I believe we should strive not to move the near-term yield curve down.

In the broader context of the historic nature of today's meeting, however, it's quite striking that among the prominent subjects are a quarter-point bulge in inflation and the issue of whether long-run and trend inflation should be 1.5 percent or 2.0 percent. Few now doubt whether the Federal Reserve can or will keep inflation stable, a question that was seriously in play decades ago. Your leadership in the intervening years, Mr. Chairman, completed the work begun by your predecessor to restore the expectation of price stability that had been lost in the transition from the prior commodity standard. Given the number of centuries that regime was in place, I believe future

January 31, 2006 44 of 106

monetary historians would be justified in marking the Volcker–Greenspan era as a millennial transition. This achievement required altering public expectations about the trend rate of inflation that we would tolerate. It also required substantially damping the association between strong real growth and resurgent inflation. Moreover, it required demonstrating that there was no need for adverse cost shocks to spawn higher trend inflation. The key to all of this, in my mind, was establishing a pattern of predictable FOMC behavior that was well understood by the public. Leading this transition as you did, Mr. Chairman, required tremendous acumen and tremendous courage. Personally, Mr. Chairman, I count serving with you, however briefly, as one of the greatest privileges an economist could imagine.

CHAIRMAN GREENSPAN. Thank you very much. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. By now I'm sure that most of you are tired of hearing me report that conditions in my District are not as vigorous as conditions in most of the country. I know that I'm tired of repeating it. Fortunately, optimism is increasing in many parts of my District. My directors and business contacts that have national and international business interests report fairly solid conditions in most of their industries. They tell me that they plan to maintain a strong pace of capital spending this year and that they expect healthy productivity gains from doing so. These trends encourage me to think that our economy will be able to maintain the 3 percent rate of structural productivity growth that underlies the Greenbook baseline projection. Since we are nearing the point of monetary policy neutrality, I'm counting on a strong rate of productivity growth to help us gradually nudge the inflation rate back down over the next several years. I have not changed my thinking about the underlying trends in the economy since our last meeting. I was pretty much in sync with the Greenbook outlook then and remain so today. The

January 31, 2006 45 of 106

BEA's fourth-quarter revisions appear to affect the timing of economic activity across a couple of quarters but not to affect the longer-term outlook.

Even though I still expect to see headline and core inflation moderate over the projection period, I have become a bit more sensitive to the upside inflation risks in the baseline projection. First, in the Greenbook we received last week, the staff concluded that inflation this year could creep up a bit more than they had thought in December, and the staff elevated their estimate of core PCE inflation for the fourth quarter from 1.9 percent to 2.2 percent as a result of the most recent BEA report. The staff hedged against that possibility by imposing a temporary 25 basis point surtax on their December fed funds rate path beginning at our next meeting, and it seems sensible to me to keep this option open. At our December meeting I said that I thought we were very close to being able to stop increasing our fed funds rate target at every meeting. I still think so. If monetary policy is a combination of science and art, I think we're now out of the laboratory and inside the art studio, and having flexibility as we go forward is highly desirable to me.

Finally, Mr. Chairman, I have to admit that I've spent more time since our last meeting thinking about what to say in acknowledgement of your last meeting than I've thought about economic conditions, and it's impossible to come up with words to express my feelings. I just simply want to say that it has been truly an honor and a privilege to serve under your leadership of this Committee. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. I also have not had the occasion in the public farewell ceremonies to say thank you to you. So let me say what an honor it has been to serve under your leadership and to be associated with the great confidence and respect you've given people in what we do at the Fed. Thank you. Thank you very much.

January 31, 2006 46 of 106

Given your request for brevity, let me confine my remarks to a few observations about our District that may have implications for the national outlook. Generally I would say that the anecdotal information and the available data suggest that economic growth in our southeast region continues at a very solid pace. At the past two meetings, I reported evidence of the slowing in the real estate markets, and those reports continue. It has become especially notable in a few selected markets, including several that have been hot for some time, like Florida. Banks are now clearly pulling back on their construction lending. We're receiving increasing numbers of reports that planned projects have either been put on hold or are not going to come out of the ground. And we're now beginning to see some signs of downward pressure on prices—in some cases in the high single digits, but in a few markets substantially higher than that. As an example, we heard one report that in the Panama City area of Florida, condos that had been going for \$600 a square foot are now being priced at \$450 a square foot. That's a 25 percent correction. I think we have to view these corrections that are taking place as healthy. Worker shortages due to hurricane cleanup work in Louisiana and coastal Mississippi are also contributing to the slowdown in Florida. I would emphasize, again, that this evidence is not indicative of a broad trend throughout the District. Our general real estate situation still feels pretty solid.

I'd also like to make a couple of comments on the situation of the hurricane areas, where, according to the staff, FEMA spending turned out to be less than expected in the fourth quarter. At the last meeting I noted it had become clear that the stimulus from the flow of government funds would be slower than expected. Work in both Mississippi and Louisiana is still mostly in the initial cleanup phase. Despite what we see in public statements, there is no substantial rebuilding under way yet, except for casino reconstruction in Mississippi. The grace period on mortgage payments has already or is about to run out, and this could bring additional hardship for the affected property

January 31, 2006 47 of 106

owners, with obvious implications for lenders. Indeed, a handful of small community banks may actually be at risk.

Considerable uncertainty exists concerning federal flood insurance policies going forward, and in certain areas no rebuilding can take place until flood maps are redrawn, building codes are reassessed, soil contamination is assessed, and permits are issued—all of which could take many, many months. Because so few people have been able to move back to their properties, even those homes that were only modestly damaged by the storm are now beginning to show signs of deterioration due to mold and a lack of maintenance and repairs. I think the take-away from this discussion is that the economic kick we've been expecting from hurricane rebuilding is probably going to be spread over 2006, 2007, and perhaps even a bit further.

The damage to the energy sector in the Gulf now appears to have been worse than most had thought. Although national production of crude is reported back at about 92 percent of prehurricane levels and natural gas production is back to 95 percent of pre-hurricane levels, our sources tell us that 25 percent of the Gulf region capacity for crude and about 16 percent of the Gulf capacity for natural gas remain shut in. And that shortfall, in my view, remains significant. More than half the crude oil that is shut in is attributable to the production lost from Shell's Mars platform, which isn't expected to be operational until mid-2006. Our contacts are also now saying that natural gas production will probably not fully return to pre-hurricane levels because the production at several sites is already in decline—as much as 8 percent below the peak.

Finally, as has been the case for some time, we've continued to receive information from our directors of pricing pressures, of plans to push through price increases, and of a greater willingness on the part of upstream purchasers to accept those increases. And I think we are likely seeing some of that in the latest inflation data.

January 31, 2006 48 of 106

On the national front, very briefly, like everyone else, I was surprised and somewhat disappointed by the considerably weaker than expected initial report on fourth-quarter GDP, but like the Greenbook, I think I'm satisfied that we can explain most of the shortfall. I do not see it as an erosion of fundamentals, and in fact, I think we may well see some offsetting gains in the current quarter. I expect a return to solid growth in the current quarter. My own forecast for output, inflation, and unemployment for 2006 and 2007 remains positive.

At the same time, there are some especially interesting unknowns and risks at the moment that we'll have to watch being played out. As others have already suggested, energy remains a major wild card with the very delicate balance between worldwide supply and worldwide demand. With recovery of the energy industry in our Gulf Coast region not yet complete, with the fragile political situation in many oil-producing regions around the world, and with the ever-present risk of natural disaster and sabotage, it seems reasonable to expect continued elevated energy prices and substantial energy-price volatility. It's not clear to me whether households and businesses have fully adjusted to these new realities. The residential real estate adjustment, which seems to be beginning to take place both in the level of activity and in prices, could have important implications, as Dave Stockton and others have already suggested. Whether consumers will be able and willing to continue to smooth their expenditures relative to current income seems to be substantially dependent upon home prices, mortgage interest rates, and the ability to tap home equity. And the potential inflation pressures we've highlighted for some while, and which still do not seem to have played out fully, should not be too easily and too quickly discounted.

All things considered, I think we have to be reasonably comfortable with the outlook and the policy path we have been on, but I look forward to discussions of policy and the way we communicate what we see ahead. Thank you, Mr. Chairman.

January 31, 2006 49 of 106

## CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, in thinking about the status of the U.S. economy and the appropriate funds rate target at this meeting, I would start by suggesting that, in my judgment at least, the current funds rate is probably within the neutral range. Therefore, we should be mindful of not going too far, especially when it would appear that growth is slowing to trend. The most compelling reason for considering the move now is the continued drift upward in core inflation, but even in this case, I think we need to be especially aware of the past increases in the funds rate. We have yet to see their full effects on inflation.

The fourth-quarter growth was surprising; but at this point, as others have said, it does not yet alter our long-term outlook. Like the staff, however, I revised upward my 2006 forecast ½ percentage point and now expect that growth will be about 3¾ percent in 2006, about ½ percentage point above trend, and will return to trend in 2007. Turning to the inflation outlook, I expect core CPI inflation to be about ½ percent this year, as higher energy prices are passed through to higher overall and core inflation. However, it is reasonable to expect that the increase will be temporary, as others have said, with core inflation likely to fall back to ½ percent in 2007. The reasons for this pattern have a familiar ring. Greater-than-trend growth reflects the lagged effects of past monetary accommodation and generally supportive financial conditions, whereas the prospective slowing growth reflects the removal of monetary accommodation and, in this instance, higher energy prices.

Evidence from our District is consistent with an outlook of strong but slowing growth as well. Manufacturing production and new orders rose solidly. Expectations for future production remained high, and expectations for future orders actually surged. Hiring plans also rose strongly in December and January. However, for the District as a whole, hiring announcements were only

January 31, 2006 50 of 106

slightly greater than layoff announcements. Finally, housing showed signs of leveling off, and consumer spending was solid, though not spectacular, during the holiday season. In fact, a number of our contacts said their holiday sales were below plan. Just quickly in the farm sector, there are concerns being voiced for 2006 following a generally good year in 2005, and they were mostly that drought may be reemerging in the District.

Wage pressures in the District remain mostly subdued, and increases in raw material costs actually slowed somewhat. However, manufacturers continued to raise output prices in response to past increases in input costs, and a substantial number said they were raising wages more than normal for certain types of workers in short supply. Reports of retail prices said that increases were down somewhat from the last meeting but still higher than they were just last summer.

Let me turn just briefly to the risks. I would submit that inflation risks are on the upside and output risks have become more on the downside recently, not exactly the kinds of risk that are friendly from a policy perspective. The outlook for core inflation is 2½ to 2½ percent. This is higher than I would prefer. Moreover, the potential for even higher energy prices makes core inflation more likely to be higher rather than lower over the next several months. But at the same time, the risks to output are on the downside. First, forward momentum has certainly diminished. For example, real GDP grew about 2.6 percent during the last half of 2005, decidedly below trend. In addition, while the fourth-quarter slowdown was probably temporary, it could also be signaling a more fundamental slowdown. Finally, a possible increase in the term premium poses downside risks to growth. You know the term premium is far below the historical average. If the decline reverses faster than expected, both would be significantly weaker as shown by the Greenbook alternative scenario. As I see things then falling out, the choices are obviously difficult, but I think that the inflation risk for the time-being is the greater risk, and therefore I would be inclined to move

January 31, 2006 51 of 106

at this meeting. But we should have the odds no greater than 50-50 that more upward changes are likely in the fed funds rate at the next meeting.

And finally, Mr. Chairman, although I have not served as long with you as some others around this table, I have served among the longest with you, and I would like you to know it has been a real privilege.

CHAIRMAN GREENSPAN. Let's break for coffee. Since our time is really quite restricted, I would request that we come back in seven minutes. [Laughter]

[Coffee break]

CHAIRMAN GREENSPAN. David Stockton.

MR. STOCKTON. Mr. Chairman, I quickly consulted with my labor economist experts at the coffee break about your question about the demographic effects on the workweek, and, indeed, there is—and it's incorporated in our forecast—a modest effect of the aging of the workforce on the workweek, with older workers having shorter workweeks. Obviously, the longer-term trend has been driven more by the shift in the composition of employment from manufacturing toward more service-oriented industries, which have shorter workweeks, but there is a perceptible demographic effect as well.

CHAIRMAN GREENSPAN. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. What strikes me from my conversations with my contacts is the growing confidence that they do not see major risks on either side, that there are reduced standard errors around their projections. Very few had comments or concerns about inflation outside of energy, which, of course, is on everybody's mind.

I'd like to make an analytical point that actually comes from my UPS contact. I think I mentioned at an earlier meeting that UPS is moving its business off the mixed rail—the piggyback.

January 31, 2006 52 of 106

That move is a consequence of the fact that the railroads are unable to speed up delivery times, which in turn is a consequence of the railroads' decision that it is not worth the capital investment that would be necessary for what for railroads is a relatively low-yielding business. UPS is also working to maximize the return on its own capital. The company is very disciplined about adding capital and is planning to price low-yielding business out of its network. That is, for the low-yield products, they're going to raise prices expecting that the business will go away. My contact at UPS said that he thought that the strategy would not really be successful and that they will probably be looking at substantial increases in capital spending in '07, once they find that they have optimized their existing plant, that the volume doesn't go away when they try to raise the prices on it, or that not enough of it goes away. And I think that this phenomenon might be more general in our economy. Companies are very disciplined about their capital investment. But as the economy continues to expand, they're going to run out of ways to optimize the existing capital plant, and we will see investment coming in stronger over the next couple of years. That's an observation that may have more general application.

I support the Greenbook's forecast, plus or minus a quarter of a standard deviation.

[Laughter] Not worth worrying about. Instead, what I've been trying to do is to make lists—and these could be much longer—of risks on the high side and the low side. On the high side, I would point to commodity prices, which are high and have gone up a lot, and growing strength—as I just commented—in business fixed investment. I mention high money growth, because I don't think that the rapid money growth is fully explained, and it certainly has frequently been a precursor of higher inflation.

Some indicators on the other side—we talked about housing, the possible reversal of the unusually low saving rate, the behavior of the yield curve, the risk of oil supply disturbances. Most

January 31, 2006 53 of 106

of oil has been demand-driven, but supply disturbances because of the problems in the Middle East primarily—Africa as well—could certainly produce a significant downward shock on economic activity and upward shock on prices. No doubt these lists could be amplified, and I think it's probably worth spending more time thinking through the risks and how to respond to various events than it is trying to optimize the forecast and get that last quarter of standard deviation exactly right.

Mr. Chairman, many around the table have commented about their experience serving here. I will, of course, echo those. I would like to put a little different angle on it. Of the people who have had a major impact in my life, you are certainly one. I mark on the fingers of one hand the people who have had extraordinary influence on me. You have influenced me mostly in my professional life but also in many aspects of leadership that go beyond economics and policy in a narrower sense. So I thank you for that. I am also looking forward to continuing to learn from you. I understand that you have some books, at least in your head. And given my interest in making sure we have clear communication, I have a suggestion for a title for your first book. And it is in line with some books by your predecessors. So I suggest "The Joy of Central Banking." [Laughter]

And I suggest that your second book be "More Joy of Central Banking." [Laughter]

CHAIRMAN GREENSPAN. "How to Be a Joyous Central Banker, Even Though We Don't Have Hearts." [Laughter] Can we end the speculation on the title? [Laughter] Thanks very much, Bill. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me start with one anecdote about housing activity in the District. I don't know how representative this is nationwide, obviously, but there are signs of slowing in both housing construction and, more dramatically, in sales recently. And this winter in the Twin Cities, several hundred unionized construction workers are not working. Last year 100 percent were. But they're all expected to be back at work in the spring, and that suggests

January 31, 2006 54 of 106

to me—and this is more a question than a conclusion—that the ultimate correction in housing may occur later and be more severe than I was earlier expecting.

As far as the national economy is concerned, like others, I am inclined to discount the fourth quarter. I find the Greenbook story about the outlook reasonably convincing. I personally think that we will see pretty good growth in both '06 and '07. I tend to rely, as you know, on the underlying fundamentals and the resilience of the economy, and those things seem to me to be sound and in place. And so I think the overall outlook is pretty good.

I do think that there was a disconnect in the fourth quarter between the supply or output side and the demand side. If you look at the numbers for employment and hours, you would have certainly come up with a stronger forecast. Now, you may plug in a negative productivity number. That's one way of reconciling it. Maybe the November and December employment data will get revised down. I guess that's another way of reconciling it. Perhaps some of the aggregate demand components will ultimately be revised up a bit. But there does seem to be a disconnect there, nothing that I find all that troubling, but something I think worth bearing in mind if we want to think about the fourth quarter.

I think the key to the outlook and to policy going forward, though, is inflation. And I went and looked at what has happened to the core PCE over the past eight or nine years. And the range of increases in core PCE inflation over that period was about 1½ to 2½ percent, and I think the average over the past eight or nine years was something like 1¾ percent. I don't cite those numbers just to prove that I can look them up. I cite them because I would characterize that whole period as a period of low inflation, maybe something resembling price stability. And if I ask myself, "Is inflation likely to break out on the high side of that range in the relatively near term?" my answer to

January 31, 2006 55 of 106

that is "no." And I think most bond market participants, at least the way they are pricing things, would also answer that question with a "no."

Part of that is, of course, that we have been moving policy, and it seems to me that policy, measured by the real federal funds rate, is now certainly in the ballpark where it needs to be. I anticipate that we'll move again today, as I think we should, in part to validate market expectations. Is policy perfectly positioned within the ballpark? Well, I don't know the answer to that, but I do think it is well positioned within the ballpark, and I think we need to bear that in mind as we go forward.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Mr. Chairman, in the interest of crispness, I've removed a substantial tribute from my remarks. [Laughter]

CHAIRMAN GREENSPAN. I am most appreciative. [Laughter]

VICE CHAIRMAN GEITHNER. I'd like the record to show that I think you're pretty terrific, too. [Laughter] And thinking in terms of probabilities, I think the risk that we decide in the future that you're even better than we think is higher than the alternative. [Laughter]

With that, the economy looks pretty good to us, perhaps a bit better than it did at the last meeting. With the near-term monetary policy path that's now priced into the markets, we think the economy is likely to grow slightly above trend in '06 and close to trend in '07. We expect underlying inflation to follow a path close to current levels before slowing to a rate closer to 1.5 percent for the core PCE sometime out there. Relative to the Greenbook, we're a little softer on growth in '06 and a little stronger in '07, but our inflation outlook is similar.

The uncertainty around this forecast still seems considerable, perhaps more than the market has priced in. On the positive side, consumer and business confidence still seems pretty high, with

January 31, 2006 56 of 106

employment growth solid and compensation growth likely to pick up. We think that household income growth is likely to be pretty strong. Investment may be strengthening, and it could surprise us with more strength. The tone of the anecdotal to us seems more positive, less cautious than it has been. And just to cite our Empire survey, the six-month-ahead numbers show a fair amount of optimism. Overall, financial conditions, of course, still seem quite supportive of continued expansion. Global growth has strengthened. And like the staff, the market seems to have looked through the negative surprises in the fourth-quarter numbers and priced in a bit more, rather than less, confidence about the strength of demand growth going forward.

On the darker side, we have the familiar concerns about potential adverse shocks, energy supply disruptions, terrorism, et cetera. But even in the absence of these events, we face a fair amount of uncertainty about key elements of the forecast. The prevailing expectation of a gradual moderation in housing prices and a relatively small increase in the saving rate could prove too optimistic. Private investment growth could slow further, productivity growth could disappoint, risk premiums could rise sharply. And, of course, that could happen even in the absence of a major deterioration in the growth or inflation outlook. But this, on balance, still leaves us with what looks like a relatively balanced set of risks around what is still a quite favorable growth forecast.

The inflation outlook still merits some concern—I think modest concern—about upside risk. Underlying inflation is still somewhat higher than we would be comfortable with over time. The core indexes are running above levels said to define our preference over time. Other measures of underlying inflation are running above the core rates. The behavior of inflation expectations at longer horizons has been reassuringly stable in the face of the elevated headline numbers, but the levels are still at the higher end of comfort. With the economy near potential, unit labor cost growth should accelerate. And, of course, although profit margins still show ample room to absorb more

January 31, 2006 57 of 106

unit cost increases, their behavior suggests continued pricing power. The strength of global demand, the continued rise in commodity prices, other input costs, and the latest increase in energy prices all suggest a possibility of further upward pressure.

With this outlook and this set of risks, we believe some further tightening of monetary policy is necessary with another small move today and a signal that some further tightening is probable. We're comfortable with how the market's expectations have evolved over the past few weeks and with the present forecast of perhaps one—maybe slightly more than one—move beyond today. It's hard, though, to understand why the market attaches so little uncertainty to monetary policy in the second half of the year. And this underscores the fact that one of our communication challenges ahead is to make sure we convey enough uncertainty about our view of the outlook and its implications for monetary policy. In this regard, I want to compliment the recent innovations to the Bluebook presentations and hope that they persist.

### CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. The surprise of the fourth-quarter GDP number and the slightly elevated inflationary pressure have caused us to take, I think, a closer look at the underlying strength of the economy. And to an extent it is reassuring—certainly, the strength in industrial production and real personal consumption. However, the risks that we have seen before remain and may, in fact, be slightly elevated. The potential risk of increased oil costs and the pass-through effect into underlying core inflation is at least slightly heightened, and with the flattening of housing values, the potential effect on consumption remains slightly strong.

It is often easy for us at these meetings to say we'll have a clearer understanding at the next meeting of where we are; but although the next meeting answers this meeting's questions, it also raises new questions. However, in this instance, we may have more reason than not to make that

January 31, 2006 58 of 106

point. The January jobs number will be out on Friday. If the initial claims number has any predictive power, we may see a strong report. I couldn't help but notice the juxtaposition of the initial claims chart next to the GDP number as an indication that it's one that will be looked at carefully. Also, given the magnitude of the change in the prior-period GDP, the revised GDP number for the fourth quarter may be much different from the preliminary number. Also, between now and the next meeting, our new Chairman will be making a semiannual presentation to the Congress on the state of the economy, with an opportunity to be more definitive than we can perhaps be at this meeting.

In conclusion, I suggest that we make the obvious move and raise our target ¼ point but not be any more definitive or predictive than necessary in the accompanying statement. I support President Yellen's suggestion for flexibility in our description today. And I share with everybody else the honor of having worked with you for these four years that I've been here.

CHAIRMAN GREENSPAN. Thank you very much, Governor. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. The Greenbook baseline presents a relatively positive scenario. But as the 90 percent confidence interval given in the Greenbook clearly indicates, there is considerable uncertainty around this baseline. In a theoretical world of certainty equivalence, that range of uncertainty would not matter. But as you've taught us many times, in the world of practical policymaking, how that uncertainty is resolved will matter importantly for policy judgments.

As a mere cadet, if you will, sitting next to the monetary policy Yoda, [laughter] I will attempt to look at some of these uncertainties and to understand how they may unfold in their implications for policy. Yoda, of course, is a complimentary word in my household. [Laughter] One particularly salient aspect of uncertainty relates to the way that inflation expectations are

January 31, 2006 59 of 106

influenced by energy prices. As we've seen recently, despite spiking oil prices in December, near-term inflation expectations remained stable or edged even somewhat lower, reversing the run-up that we saw in the fall. As the presentation this morning showed, preliminary January Michigan survey results for median inflation expectations for the coming year ticked down, and median five-and ten-year inflation expectations also moved lower. Rate spreads from TIPS also indicated remarkably contained inflation expectations despite oil price shocks.

This stability is both remarkable and quite important, because, in my view at least, the optimal course of monetary policy at this juncture depends critically on the fragility or stability of inflation expectations in the presence of the oil price shock. I judge that, for now at least, this important element of uncertainty supports a continued execution of the strategy we are following to date, with no need to fear that we're falling behind the curve, even as energy prices have spiked again. Of course, with the slight rise in the near-term inflation outlook and, in fact, slight deterioration in near-term inflation itself, prudence will require close monitoring of these variables as we go forward. But thus far, I judge that the announced strategy is consistent with maintaining our credibility.

Second, as we discussed earlier, there is great uncertainty about why long-term rates are low and what the shape and level of the yield curve may imply for us. As we saw in yesterday's Board briefing, forward nominal rates fairly far out in time have moved down over the past year, both here and abroad, and are low today by historical standards. As we know, long-term rates are low today partly because inflation expectations are low. If this were the whole story, short-term rates would not need to depart from the historical terms or norms in real terms. But while this is part of the story, it isn't the whole story. As we've already discussed, if the shape of the yield curve and low

January 31, 2006 60 of 106

rates both indicated that market participants expected some further economic weakness, then the proper response would be to run a looser-than-average monetary policy.

But I agree, and I think most of us agree, with the staff assessment that the low real longterm interest rate and a flat yield curve are not precursors to a global softening and an expected drop
in rates but rather are due to an unusually low term premium. In my judgment, part of the reason
for that low term premium is an increased assessment on the part of global investors that the future
looks like an environment involving less risk than usual. This was borne out I think in Dino's pie
charts earlier on and also in the global equity markets. I'd also say, based on various conversations
I've had with central bankers in January on the various committees that I attend and others I attend
with the Chairman, there is a general sense in the world of policy that this low-risk assessment is
approximately right. However, I continue to think that these lower rates reflect some forces that are
holding back investment demand globally. And, for the United States, I think they also reflect a
drag from the external sector. However, with corporate balance sheets in good shape and global
growth firming, I don't expect a sudden reassessment of risk and a rise in the term premium to result
from these sources.

I do have some concern that we may see a snapback in term premiums from another source that we've touched on a bit already, and that's the third and final uncertainty I wish to look at, which is the housing sector. Here I'd say that President Santomero's comments in some sense preceded and introduced mine. I don't doubt that the housing market is slowing somewhat, but I do wonder about the impact of a slowing of house prices and wealth extraction on household saving and consumption. Here I pick up where Dave left off, which is that the models take a historical norm. Let's say we're at about the 3 percent that Dave indicated. I think there's possibly a greater risk, for reasons that Dave has already indicated, that we may find a much stronger impact on the global

January 31, 2006 61 of 106

economy, certainly on the U.S. economy, based on a slowing of housing prices. And here, though I recognize their economies are different, I am still somewhat troubled by the experience in the United Kingdom, Australia, and the Netherlands, all of which had an unexpectedly large impact, from a GDP standpoint, from a relatively slow flattening of house prices. I recognize that these other economies are different from ours, but I'd also say that we've seen even in our own economy some nonlinearities that have emerged—for example, as asset prices moved down relatively rapidly—that might have surprised us in the past.

So what's the implication of all of these uncertainties? I'd like to put three things on the table for this meeting. First, I continue to believe, as I think the Greenbook or the Bluebook does, that the equilibrium real rate has, in fact, moved down somewhat on average, to lower than it was, let's say, over the past ten years, with the exception of the recessionary periods of 2001 and 2002. Second, I firmly believe, as do many of you, that we are well within the range of neutrality at this stage. And, third, since I would say there's a great deal of uncertainty here, I want to make sure that what we say, both in word and in deed, reflects a great deal of flexibility. I heard Vice Chairman Geithner suggest that we want to put out some words that say it's probable that we'll move at the next meeting. I suggest that we be a little more nuanced and put out some words that suggest it's at least possible that we move at the next meeting.

Having said all of that, obviously, I, along with everyone else, think that what happens going forward will be extraordinarily data-dependent. All the more reason for us to keep, if you will, our powder dry and our options open. Thank you very much, Mr. Chairman.

CHAIRMAN GREENSPAN. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. The projections I submitted for this meeting reflected expectations of an economy that probably is operating in level terms somewhere in the

January 31, 2006 62 of 106

neighborhood of its long-run, sustainable potential and will continue to do so over the next two years with growth broadly in line with the growth of potential and inflation basically stable. My forecasts for 2006 are very close to those I submitted last January and June. That's partly a product of innate stubbornness. [Laughter] But it also reflects the fact that 2005 came in largely as expected—after allowance for hurricanes and an energy shock last year that elevated core inflation and damped growth somewhat compared with our forecasts last January. This is encouraging in that it suggests that we are not looking at major unexplained and unanticipated forces acting on the economy.

At this point, our focus appropriately is on keeping inflation contained. I see several reasons for optimism in this regard. One is the performance of core consumer prices and price measures, which continue to suggest that the pass-through of higher energy prices will be limited. Core inflation was roughly stable last year. It picked up a bit in the fourth quarter, but that was from unusually low readings in the third quarter. Declining consumer inflation expectations in the most recent Michigan survey, along with the failure of market-based inflation compensation readings to respond significantly to the substantial run-up in oil prices and higher core readings over the intermeeting period, just reinforce my assessment that any pass-through should be small and limited in duration.

As we noted at the last meeting, perhaps the greater threat to sustained good inflation performance comes from possible increases in pressures on resources. The critical question is whether growth in output close to trend is a reasonable expectation with only modest further policy firming, given the low level of long-term rates, reduced drag from energy prices, and a boost from rebuilding. I thought it was a reasonable expectation, for a number of reasons. First, after smoothing through the fluctuations caused by auto incentives and hurricanes, private domestic final

January 31, 2006 63 of 106

demand already showed signs of moderation last year. Growth in private domestic final sales slowed from 4¼ percent in the first half of the year to 3 percent in the second half of the year, with every element—consumption, business fixed investment, residential housing investment—moderating. The staff estimates that about 0.3 of this was due to hurricane effects, but that still leaves underlying private demand slowing to an annual rate of about 3¼ or 3½ percent. This moderation did not reflect the full effects of our policy tightening, especially on the housing market. Even well-anticipated increases in the short-term rates seem to be having a significant effect on housing markets, which have become more dependent on adjustable rate mortgages to maintain affordability. We are just beginning to see the anticipated slowdown in this sector.

With growth in consumption and sales constrained by a leveling-out of housing wealth, businesses are unlikely to see the need to step up the pace at which they are adding to their capital stock. As a consequence, investment growth could slow, at least slightly, over the next few years, reflecting reduced impetus from the accelerator. Finally, although foreign economies are strengthening some, foreign investment and consumption remain subdued relative to income. And given our continuing outsized appetite for imports, net exports are unlikely to be putting added impetus to demands on domestic production.

I think there are several upside and downside risks around this picture of growth near potential, as a number of you pointed out. I agree that the housing market is the most likely source of a shortfall in demand. I don't think we can have much confidence about how the dynamics of this market will play out now that it has begun to soften. My suspicion is that, as little bubbles in the froth are popped, the risks are tilted more toward quite a sharp cooling off than toward a very gradual ebbing of price increases and building activity. On the other side, it seems to me global demand would be a major upside risk to growth and to price stability. The extraordinarily rapid rise

January 31, 2006 64 of 106

in commodity prices and upward movement in global equity prices may indicate a very fundamental turnaround in foreign demand and attitudes beyond just a stepwise strengthening of growth. For now, these remain risks that we'll need to monitor.

In making my forecast, I assumed we would tighten at this meeting, and likely at the next as well, to gain greater assurance that inflation will remain contained over time, consistent with my forecast of a 1¾ percent increase in core prices in 2007. However, I do see action in March as dependent on the readings we get in coming months. There is, as usual, considerable uncertainty about the precise nature and magnitude of the risk to the outlook, but we're dealing with an economic picture that overall is remarkably good and expected to remain that way for the foreseeable future.

Reflecting on this situation, among many, many aspects of the past, I end my remarks as I began them: Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. When I was preparing for this meeting early last week, I was feeling very comfortable with the forecast of good growth in 2006, in the mid-3 percent range near potential, and a modest uptick in core inflation above 2 percent. As many of you have already remarked, the GDP numbers on Friday made me slightly more pessimistic, both on growth and on inflation. The surprise drop in government spending, I have full confidence will turn around. Final sales fell, however, so that all the growth that occurred in the fourth quarter came from inventory growth. Given that inventory–sales ratios continue to run at historically low levels, though, inventories should continue to be a source of growth going forward. As many of you also have noted, other indicators show much stronger performance. Initial unemployment claims, goods orders, capacity utilization, and strong corporate balance sheets—all of them effectively say that we

January 31, 2006 65 of 106

have a strong foundation underneath this growth. The inflation numbers ticking up to 2.2 percent gave me a bit of pause. We came through two good quarters, the second and third quarters, with very low inflation; but again, the uptick shows how much variability we see around the inflation numbers quarter to quarter and warrants attention.

The one area—and I want to second Dave Stockton's remark—of main concern is the housing market. Let me talk about it a little differently from some previous comments today. When we look at the aggregate levels of debt that households have and relative prices, one of the things as an old lender I worry about is the ability to service the debt and the discretionary spending that households have. While 80 percent of mortgages are fixed rate, 20 percent are variable. Starting in 2002, we saw a jump in ARMs, taking advantage of the very steep yield curve at the time. We now are in a period when not only the fancy option ARMs, the exotic products of the past eighteen months, but also the 3/1 ARMs and the five-year ARMS that became very popular in 2002 and 2003 are repricing.

If interest rates just hold where they are right now, we estimate that the monthly debt service cost is going to go up by at least 50 percent on that 20 percent of mortgage portfolios. If you look at the Greenbook, you'll notice that the financial obligation ratio rose quite substantially in the past six months. It is now back to the peaks of 2001 and 2002, and we have a lot of mortgages still to reprice. We also know that some of these exotic mortgages don't amortize, but they will kick in and start amortization and that will also pull cash out of discretionary spending.

In an overall look at consumers, with housing and the cost of heating this winter rising, you're beginning to see a little caution in the borrowing numbers. The drop in home equity lines of credit that I mentioned a meeting or two ago now has been sustained through the whole quarter. So we have actually seen that home equity lines outstanding that have been drawn on have dropped.

January 31, 2006 66 of 106

Consumer credit as a whole dropped, excluding mortgage credit, and mortgage growth as a whole slowed to just over 10 percent. So households are signaling that they're pulling back on new borrowing, not just in housing but in general. When you look at the ability of consumers to spend discretionarily out of their monthly take-home pay, these are signals we need to look at. And the rising fixed payments that they have is something, in looking at the tail of the distribution on housing market risk, that I think is important for that segment of the population going forward.

The other sad thing is that this is our last meeting with the Chairman, and I just personally also want to echo some of the comments of my colleagues around the table to thank you for your leadership. I've been very impressed with the kind of atmosphere that I found when I joined during your tenure as leader of this institution. The integrity with which everything is done, your emphasis on the quality of ideas, and your continuing to search for new ways to look at information—because the economy is dynamic—remind us that we have to watch for new things always evolving. The collegiality with which you have led this organization has made it enjoyable for all of us to be here. And finally, as an old risk manager, I was glad to feel right at home with your approach to monetary policy. [Laughter] So thank you for your leadership. It has been a pleasure to have served with you.

CHAIRMAN GREENSPAN. Thank you so much. Vincent.

MR. REINHART.<sup>3</sup> Thank you, Mr. Chairman. I'll be referring to the material that Carol Low handed out during the coffee break. Judging by the information derived from money market futures plotted in the top panels of your first exhibit, this seems likely to be another of those meetings in which the important part of the discussion is about words, not the upcoming deed. As can be seen from the bars in the top left panel, market participants put near a 100 percent probability on a ½ point firming today and high odds on a like-sized move at the March meeting. Both those probabilities were marked up over the past seven weeks, partly on apparent increased pressures on costs, what with oil and other commodity prices surging and the foreign exchange value of the dollar weakening, and—unfortunately—on market commentary that was taken as having an inside track on your policy choices. The

<sup>&</sup>lt;sup>3</sup>The materials used by Mr. Reinhart are appended to this transcript (appendix 3).

January 31, 2006 67 of 106

expected federal funds rate, plotted in black in the top right side, now moves modestly above 4½ percent this spring before turning down late this year.

Market participants apparently have bought into the notion that, with inflation impetus a bit more intense, the Committee will want the real federal funds rate, the solid black line in the middle panel, more assuredly in a range that is not associated with policy accommodation. What market participants do not seem to have bought into is the idea that you'll act like the hypothetical policymakers described in the Bluebook. The paths for the nominal and real federal funds rates, derived from an optimal control exercise using the version of the FRB/US model endowing policymakers and financial market participants with perfect foresight, are shown in the bottom panels. The solid and dotted lines are the policy prescriptions under inflation goals of 1½ percent and 2 percent, respectively. With actual inflation and the FRB/US measure of long-run expected inflation now running around 2 percent, policymakers can hold the nominal funds rate steady and allow the real funds rate to drift lower to achieve 2 percent core PCE inflation in the long run. To induce enough resource slack to work toward a 1½ percent inflation goal, however, policymakers would have to raise the nominal funds rate to about 5 percent.

Market participants see you steering between those two paths for a while probably for some combination of three reasons. The first two explain why—even if your goal for inflation is 1½ percent—you might be less aggressive than in the corresponding simulation. For one, market participants may see less near-term pressures on inflation than in the Greenbook and its extension. For another, they may believe you'd tolerate inflation toward the high end of that range, in part because of the perception that you would be unwilling to create economic slack deliberately to achieve a different outcome. Instead, they may think you are willing to wait for some opportunity in the future, when a negative shock pulls inflation down. And the third is a reason that—even if you were aiming for inflation of 2 percent—you might be tighter than the corresponding simulation. In particular, market participants may believe that your policy choice will be shaped by considerations about risks that deterministic simulations cannot capture. For example, you might be satisfied with inflation around current levels, if it were ensured, but be asymmetrically concerned with regard to its being higher rather than lower. Thus, you might tighten more than the 2 percent goal simulation as insurance that inflation does not move higher.

If, like market participants, you see yourselves operating in the range between the two paths called for by the optimal control exercises, you most likely would be willing to tighten ½ point today and place high odds of doing so again in March. The two chief wording issues that follow from that decision are listed at the top of exhibit 2. First, how high are the odds you place on tightening at the March meeting? In writing the Bluebook, we thought you'd want to preserve the current configuration of financial market prices, which appears to be based on a 70–30 split on tightening versus no action in six weeks. Thus, in the portion of the statement language of alternative B listed in the bottom left, we offered the sentence, "The Committee judges that some further policy firming may well be needed to keep the risks to the

January 31, 2006 68 of 106

attainment of both sustainable economic growth and price stability roughly in balance." We thought that this wording gives a strong presumption that policy will tighten once more but not the certainty that makes many of you uncomfortable. From what I've heard today, I would suggest tweaking that verb phrase to dial down the market's perception of future action by removing the word "well."

The second question is, How strongly do you want to underscore that coming decisions depend on incoming economic data? We thought that the last sentence of the December statement, also repeated in the bottom left panel, provided sufficient assurance on that score. Indeed, this layout seemed to have the attraction of expressing a back-up strategy in which you would deviate from the anticipated policy path if events dictate. We also thought that you'd want to make as few changes to the language as possible today. An alternative is to reverse the order of the last two sentences, as is done at the bottom right. "The Committee will respond to changes in economic prospects as needed to foster the attainment of both sustainable economic growth and price stability. In these circumstances, the Committee judges that some further policy firming may well be needed to keep the risks to those objectives roughly in balance." Note that the first sentence now describes the baseline assumption, not a contingency plan. This wording is similar, but not identical, to language circulated by President Poole. It shares his reordering of the sentences but does not repeat the "measured policy firming" phrase on the logic that the Committee may want to free up expectations about action in March. During the policy discussion, it would be helpful if you would focus some of your remarks on the two questions I have raised.

With the help of exhibit 3, I now turn to my standard procedure in closing to hector the Committee on some point of governance. The issue, as I explained in my memo of January 25, is that the statement released this afternoon will likely be only partly covered by the Committee's vote. The responses to the survey I sent around earlier indicated significant support for voting on the entire statement but that a minority was decidedly opposed. Those opposed are primarily concerned that requiring members to agree on all the words in the statement may make it more difficult to reach a consensus. In addition, the public may be confused if a member dissents, not because of disapproval of the policy action but because of distaste for the words characterizing the action. Moreover, FOMC participants arguably have more leeway now to offer views to the public differing from those in the statement than would be the case if the entire document had the Committee's seal of approval.

Those favoring a formal vote on the entire statement hold that all its aspects, including the description of the economy, are important in shaping market expectations about the future path of policy. In that view, it may be a good thing that the formal vote constrains how members subsequently describe the rationale for policy action to the public, as it would send a more consistent message about the prospects for policy.

January 31, 2006 69 of 106

These arguments suggest that FOMC participants may want to consider three alternatives listed in the exhibit: (1) Vote on the entire statement and the directive. (2) Vote on the directive and assessment of risks, as now. But to clarify ownership of the remaining portions of the statement, the Committee could also vote to authorize the Chairman to provide a rationale for that action. (3) Retain the status quo, perhaps with the issue to be raised again at a later date under the next Chairman.

The two bottom panels present the formal vote for alternative B should you prefer, respectively, option 1 or option 2. (The language for option 3, as always, is in the Bluebook.) Students of this institution probably believe that the statement is partly owned by the Committee and partly by the Chairman. For the rest, what is issued at 2:15 p.m. on the day of decision is a Committee document. Thus, some people would view option 1 as delimiting the Chairman's authority, while others would view option 2 as rolling back the Committee's authority. It would seem best that such suspicions not be harbored about the new Chairman by resolving this governance issue today if option 2 appeals to you—that is, voting only on the interest rate, not the rationale, portion of the statement and granting the Chairman an explicit authority to craft the rest. If, instead, you prefer to vote on the entire statement, then I would suggest putting off option 1 to another day—so as not to risk creating a misimpression about your intent.

One such opportunity might be the March meeting. Ben Bernanke has asked me to relay that he prefers that the next meeting run for two days—Monday and Tuesday, March 27 and 28—so that you can discuss the best way to organize future Committee discussions. The Secretariat will send around formal notice about the logistics of this meeting as soon as possible, subject to a notation vote by this Committee naming a new Chairman. Some supporting documents for the two-day meeting will then circulate during the intermeeting period.

Your last exhibit repeats table 1. I should note that we changed the "smoothing" language that few of you favored. Instead, the rationale portion opens, "Although recent economic data have been uneven."

CHAIRMAN GREENSPAN. Questions for Vincent?

MR. LACKER. How do your inflation expectations evolve in your two simulations, and in particular, how are they affected by policy? Is it just through the effect of resource slack on actual inflation?

MR. REINHART. In these simulations, long-run inflation expectations evolve very gradually based on the path of actual inflation. So what happens is in the 1½ percent simulation you

January 31, 2006 70 of 106

start off with inflation expectations of 2 percent, and you have to experience inflation below that to work it down.

MR. LACKER. Thanks.

CHAIRMAN GREENSPAN. Anybody else? Do we have copies of the statement? Could you circulate them, please? I will be rather brief for a number of reasons, not the least of which is I mostly agree with what has been said around this table and I just don't want to duplicate it. I do think that this is an extraordinary economy. If you look at the world data, the balances out there in Europe and Asia and Japan—remember Japan is the second largest economy in the world, and we used to forget that because it never moved and hence did not contribute to either expansion or contraction. But it's clearly now moved beyond its very serious difficulties and is likely to be a positive force, as indeed much of Asia and now, more recently, Europe is beginning to be. So the outlook out there is benevolent, but benevolence is not something that goes on forever.

So far I think it's fairly clear that there's consensus around the table that we'll move 25 basis points today. And I think that there is an awareness that we're probably not all that far from where we want to be, considering that our major focus was the removal of accommodation, which we had purposefully put in place to bring the funds rate down to 1 percent over a protracted period. I think that, at this particular point, whatever the Federal Reserve does henceforth, it is going to become increasingly dependent on the data because we're not in the position in which we had been for quite a period of time of essentially saying what it is we plan to do and then proceeding to do it. We have run the string. We have gotten to where we wanted to be, and now the data are going to determine what largely is going to happen.

I don't think there's much debate on this particular statement relevant to what the March actual action is going to be. I suspect that whatever the Committee does in March will depend very

January 31, 2006 71 of 106

marginally on what we say today and very significantly on the whole series of events that have to work their way through over the next six weeks. And since we're not very far from where we would like to be, there's no real problem here.

Therefore, I would venture that we move 25 basis points and that we adopt the language, the critical part being "further policy firming *may* be needed." This language in my judgment is essentially consistent with the outlook as we can best evaluate it, and I would move, in the context of what Vincent has been saying, both the statement and the action and would request that our Secretary read the appropriate language.

MR. FERGUSON. Do you want to go around first?

CHAIRMAN GREENSPAN. I'm sorry. I'm trying to cut the discussion short. [Laughter]

MR. POOLE. Do you have someplace to go? [Laughter]

CHAIRMAN GREENSPAN. No, but I'm looking at the clock.

MS. MINEHAN. The clock, I mean, it has stopped. [Laughter]

VICE CHAIRMAN GEITHNER. Let the record reflect that the Committee has thwarted the attempt by the Chairman to change the process in a way that— [Laughter]

CHAIRMAN GREENSPAN. Actually I thought it was elegantly done. [Laughter]

VICE CHAIRMAN GEITHNER. Mr. Chairman, I, too, think that we should move by 25 today, and I'm comfortable with the language as it's modified here. I do think that it's important to note that the market judges the odds of March as probable. The Greenbook assumption is more consistent with that and, as Janet said, some of the Bluebook filters we can use to look at things are slightly more in that direction. But having said that, I think it's fine to leave the statement with "may," and I don't really know whether the market's reaction to that statement would take out some of the pricing now built in or leave it where it is. It's hard to know.

January 31, 2006 72 of 106

I want to say one thing in response to Vince's second question, although I'm not sure that we need to spend much time on it. I think we should defer this decision until March. My own view is that the actions the Committee takes are really not principally the changes in the fed funds rate we announce or don't announce at the meeting. They have a lot to do with how we characterize our view of the path of output and inflation relative to our objectives, the risks around that, and what we signal, if anything, about the monetary policy implications of that judgment. Having said that, I think it is hard not to argue that the Committee needs to express a view when it votes on that basic set of signals. I think it's worth deferring that judgment, though, simply because we should talk through a little more what it really means for our process and how we're going to manage the preparation and the discussion in a world where we're more explicitly deciding what we're going to vote on. So my compliments to Vince for framing it the way he did, and I suggest we defer the vote.

### CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I agree on the second point that we should postpone consideration of what we vote on for the reasons that the Vice Chairman just noted. I support the increase in the federal funds rate today. I'm a little concerned, like the Vice Chairman, that this "may" language could cause a bit of a rally in financial markets, but I think it reflects the general tone around the table and is certainly close to my thinking. I think we're more likely to have to firm than not at the next meeting—the odds are 50–50 or greater—and this puts the market on notice that that's approximately what our thinking is. So I agree with that one.

#### CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support the recommendation in terms of the 25 basis points and also the wording. I actually like "may" rather than "may well." I think the data will in all likelihood be

January 31, 2006 73 of 106

a little stronger, which will buy us that "may" to "may well" as time evolves, but not necessarily. I like the ordering as is presented here. So this fits very well into my view of where we should be. On the last point, I'd like to compliment Vince for predicting that he will yet again be back talking about it. [Laughter] I think that's the right path. I think bringing it to everybody's attention is a good thing. But your third solution, which is somewhere in between, is actually the right answer. How one fosters a consensus around that is tricky, and I'm glad I don't have to do it.

#### CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. I support the increase of 25 basis points at this meeting. I would like to add a third question to the two that Vince gave us at the top of exhibit 2. What language creates the best basis for smooth transition of future language? Every time we make a change, it gets parsed, examined, cut, read between the lines, and so forth. So part of my motivation in suggesting the reversal of those two sentences was to make what I thought might be an easier transition in the future. Clearly, it's a very fine point, but that's what we end up dealing with in order not to provide any signals that we didn't really intend.

#### CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Well, I support a 25 basis point move. I think President Poole has made a good point. I wrote a note in support of it, but I can accept the language that's here. Then, finally, I am in full accord with the President of the Reserve Bank of New York's articulation of the issue of procedure, which I think we should defer.

#### CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. I support your recommendation of 25 basis points. I rather like moving the operative forward-looking language to "may" as opposed to "may well" because I think it frees the markets to look much more at the data, as they would do naturally

January 31, 2006 74 of 106

anyway. I do think it's at least 50–50, as Governor Kohn said, maybe a little bit more, but I think "may" covers us well enough for March.

On the procedural point, I obviously agree with the consensus in the room that we should postpone this until the March meeting. I must express some uncertainty about how we vote on an entire statement and directive as a group of nineteen. So I would have a tendency toward the status quo, but that just may be because I'm inappropriately conservative and not appropriately imaginative. So let me stop at that and move on to the next person.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Yes, Mr. Chairman, I agree with your proposal. I'm very pleased with taking the word "well" out just because I think the statement should be giving the market 50–50 odds rather than something greater than that as we look forward. And we are data dependent. So I really prefer that. And I agree with postponing the discussion on procedure for the next meeting. There's much to be done, and I think in the transition we need to wait until then.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I find myself in agreement with, I guess, everybody who has already spoken. The ¼ point increase seems appropriate to me. I'm comfortable with the language as proposed, and I think we should defer the discussion of ownership of the statement until March.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. I, too, am comfortable with your proposal to move 25 basis points today. I am also comfortable with this language. I actually could have gone with an even shorter formulation that was on page 22 of the Bluebook, which basically combined rows four and five and didn't make reference to the need to move further. But all things being

January 31, 2006 75 of 106

equal, taking "well" out probably goes a bit in that direction. So I'm comfortable with the way it is. Fifty-fifty? I don't know. I am not sure that it is a 50–50 chance, but maybe it is. So I am okay with that.

On the ownership of the statement, what President Santomero said resonated with me. I think there is a halfway path here, and the issue needs a little more conversation. I don't think it's something we should decide now. So we should stay with the status quo.

I'd also like to raise some concern if Monday–Tuesday is going to become commonplace. Monday is a hard day, particularly if you're not going to give us the Greenbooks and the Bluebooks until late the week before. I think the timing puts a lot of pressure on everybody that we could alleviate by going with Tuesday–Wednesday.

MR. REINHART. The reason for Monday–Tuesday was that you probably already had travel plans that got you into D.C. on Monday, whereas having to extend to Wednesday might pose more of a hardship. But it was viewed as just for this meeting.

MS. MINEHAN. Okay. Thank you.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I, too, support your recommendation on the 25 basis point increase in our fed funds rate target. I, too, like the language as you proposed it. Removing the word "well" in the statement gives us, I think, more of the flexibility that I said I desired. And I, too, would like to defer the decision on what we vote on. Thank you.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I support your recommendation. I'm comfortable with the language. Some of the alternative language that has been suggested is attractive. I think we should make as few changes today as we can, and this recommendation does that. I also support the Vice

January 31, 2006 76 of 106

Chairman's recommendation to wait until another day to have a full discussion of the vote on the statement. Thank you.

CHAIRMAN GREENSPAN. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. And I also support fully your recommendation with respect to the 25 basis point move and with respect to the language, and I agree with the Vice Chairman's comments that the discussion about what we should vote on is very important. It has all become an aspect of policy, but there are a lot of details to discuss, and we should defer a decision on it.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I support both the 25 basis point increase and the wording of "may," and again, I think it would be good to defer the discussion about the implications of the alternatives that Vince has laid out.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, during your tenure the FOMC has been successful in anchoring long-term inflation expectations that are appropriately at low levels, and I think we want to make sure we maintain that legacy going forward. I continue to be concerned about the possibility that inflation will move up and run above 2 percent for an extended period of time. So I'm not certain how long we could experience core inflation of more than 2 percent without having inflation expectations rise.

But I can agree with your recommendation on the statement. I think it does enable us to be flexible going forward as to what we're going to do and does allow for the possibility that we might have to move higher than the Greenbook assumptions. And I agree on postponing the decision on the broader question of what we vote on at the meetings. Finally, in the spirit of less is more, I just

January 31, 2006 77 of 106

want to thank you for your service to the Fed and thank you for your service to the nation and say it has been a great privilege to work with you.

CHAIRMAN GREENSPAN. Thank you. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. I support both the ¼ point increase and the statement. I remind my colleagues that in the last two meetings we will have now removed the terms "accommodative" and "measured," and in combination, that's a very significant move forward. We have left ourselves at the point where I think we want to be, with the flexibility moving forward to respond to the data as they come in.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. I support a ¼ point move today, Mr. Chairman, and I support the language in this statement. I'd be ready to support today moving to voting for the whole statement consistent with the global march of democracy, but it's hard to be against further deliberation, especially within the Federal Reserve System. So I'll defer to my colleagues and agree to that course of action. [Laughter]

CHAIRMAN GREENSPAN. I gather correctly there's been no real interest in reversing the paragraphs. So I think that we can go forward and, as I said before, you may read—[Laughter]

MS. DANKER. Thank you, Mr. Chairman. In that the decision has been to go ahead with the status quo in the same way as in the past, I will read the wording out of page 31 of the Bluebook—the directive wording first and the risk assessment second, dropping the word "well."

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 4½ percent." And "The Committee judges

January 31, 2006 78 of 106

that some further policy firming may be needed to keep the risks to the attainment of both sustainable economic growth and price stability roughly in balance. In any event, the Committee will respond to changes in economic prospects as needed to foster these objectives."

Chairman Greenspan	Yes
Vice Chairman Geithner	Yes
Governor Bies	Yes
Governor Ferguson	Yes
President Guynn	Yes
Governor Kohn	Yes
President Lacker	Yes
Governor Olson	Yes
President Pianalto	Yes
President Yellen	Yes

CHAIRMAN GREENSPAN. I request the Federal Reserve Board to engage in addressing the requests for changes in the discount rate.

# [Recess]

CHAIRMAN GREENSPAN. The Federal Reserve Board voted unanimously to accept the discount rate requests of eleven Banks. As to the date of the next meeting, Vincent will send notice.

MR. REINHART. As soon as we have a new Chairman, which is subject to action by the Senate, signature of the President, and a notation vote by this Committee, I will send a memo around providing the time of the next meeting. As the agenda is not yet set, I am not quite sure what time it will start.

CHAIRMAN GREENSPAN. The meeting is adjourned.

**END OF MEETING**